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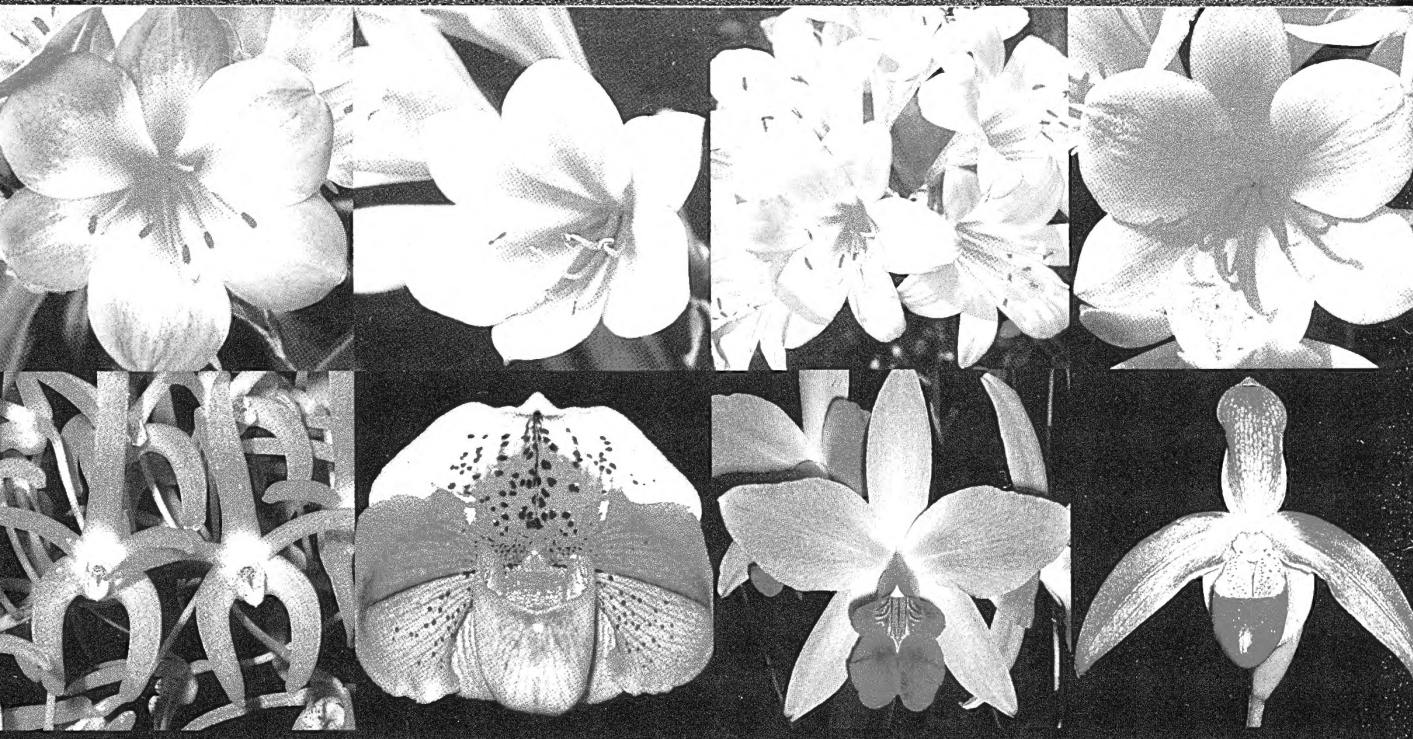

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AOR 000

From the Editor's Desk

In this electronic era, there is increased pressure on the viability of specialist magazines and periodicals in print form. Due to our subscription base, we know how many copies need to be printed each issue, however the sales of the *AOR* through newsagents fluctuates quite a bit. Over a third of the issues that are dispatched turn into sales. I am told this is very good for magazines. There is pressure on us to increase our subscription rates, due to increased production and printing costs. Obviously we are trying to avoid this, and our rates are still less, and provide better value, than the other two main specialist Australian orchid magazines (one catering for orchid society members, the other on Australasian orchids).

I appreciate that there is an increasing volume of "free" information available on the internet, through websites, forums and facebook. However I am dismayed by the amount of wrong information that circulates and the plethora of misidentified plants, which invariably gets perpetuated.

There are a few options. One is to simply increase the subscription rates, even though we are proud to have kept them under $50- for a 12 month subscription covering six issues posted. Another option is to decrease the page numbers from 64 to 48; this would enable us to keep the production costs at the same level, without a fee increase. Many people buy their copies of the *AOR* at their local newsagent. We are now hoping that these people may now take out a 12 month (or longer) subscription, which will save them over ten dollars annually, and they will get the magazine before it hits the news-stands.

I am sure there would be many who would be disappointed if our three Australian orchid periodicals no longer existed. However they all need your tangible support, through paid in advance subscriptions to ensure their continued viability. Having more subscribers would enable us to stabilise our costs. Also support the advertisers who support the orchid community by providing new and exciting plants and products for the orchid enthusiast.

Gil Teague from Florilegium – the Garden Bookstore (65 Derwent Street, Glebe NSW 2037, phone: 02 9571 8222) has advised me that he has just received a large inventory of back issues of many orchid periodicals, including the *AOR*. Contact Gil for a catalogue and details of the many "one-off" items he currently has in stock.

The Queensland International Orchid Fair has a new venue. It will now be held at the Beenleigh Showground, James Street, Beenleigh Qld from Friday 1st to Sunday 3rd March 2013.

The Castle Hill International Orchid Fair will be held in the Harvey Lowe Pavilion at Castle Hill Showground on Friday 5th and Saturday 6th April 2013. See advert on inside back cover. This event harmoniously replaces the Sydney International Orchid Fair, with new organisers Bill Miles (Orchid Species Plus) and Phil Spence (Orchid Productions). Most of the original vendors will be there including some new ones and returns of previous favourites. There will also be a raffle supporting Retina Australia. Any such orchid event is a positive for the Australian orchid community.

David Banks
Australian Orchid Review
david@hillsdistrictorchids.com

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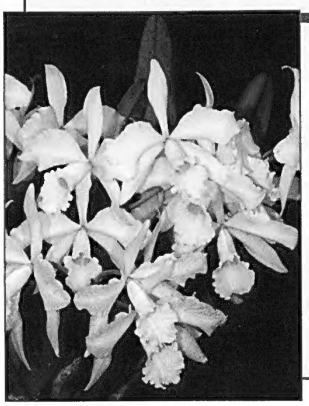


Cover Shot

***Laelia purpurata* forma *alba* 'Louanne'**
is an outstanding albino colour form of this variable Brazilian species.

Plant and photo: Bill Dobson ©

Philippine *Calanthe* Species

by Jim Cootes

The genus *Calanthe* was established by Robert Brown, in the *Botanical Register*, which was published in London, England in 1821. The generic name is derived from two Greek words; *kalos* = beautiful, and *anthos* = flower, and refers to the beautiful flowers of many of the species.

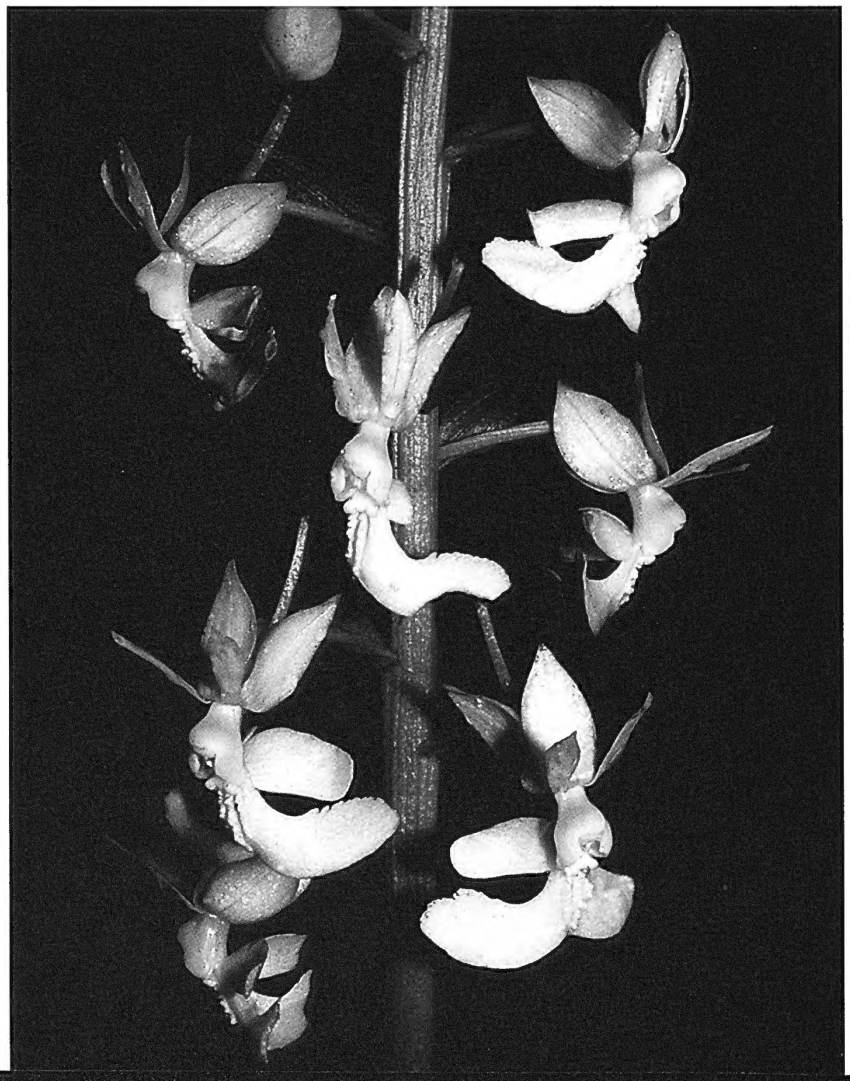
There are approximately 260 species in this genus, and they are found in southern Africa, Madagascar, Mauritius, throughout Asia, to north-eastern Australia, the islands of the Pacific Ocean, New Zealand, with one species found in tropical America - *Calanthe calanthoides* (A. Rich. & Galleoti) Hamer and Garay.

The type species for the genus is *Calanthe triplicata* (Willem.) Ames, an enigmatic species, which was originally described from the island of Mauritius, in the Indian Ocean. The majority of the species grow as terrestrials on the forest floor, but there are a couple of epiphytic species also known, but these are rare in the genus.

In the Philippines there are at least 16 species, 10 of which are endemic. The genus *Calanthe* is divided into 2 subgenera, *Calanthe* and *Preptanthe*, and the Philippines has representatives in both. Subgenus *Calanthe* has 6 sections, and the Philippines has members in 2 of the sections. This subgenus can be defined by the following characteristics: plants lacking swollen, fleshy pseudobulbs, which instead are stem-like; leaves not articulated (jointed), but persistent.

Section *Calanthe*

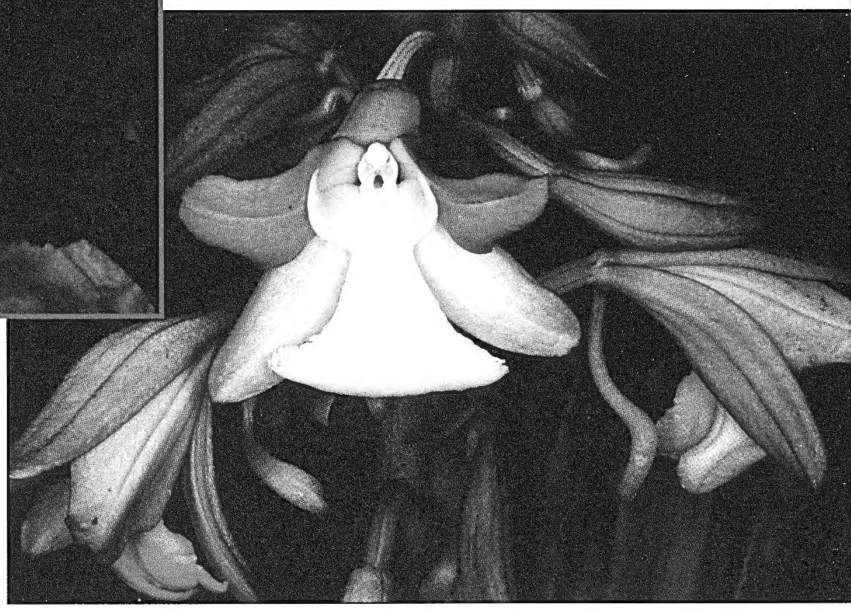
Calanthe alba W. Suarez and Cootes, was only described in 2009. It is endemic to Quezon province, on the island of Luzon, where it grows at elevations of about 1,300 metres. Non-flowering plants resemble *Calanthe furcata* and *Calanthe mcgregorii* but differ in the much longer, and totally smooth inflorescence, the flowers are also more widely spaced. The milky-white blooms are about 15mm across by 23mm high. This is a very rare species, and it is highly doubtful that it would be in cultivation outside of its native country.



Right:
Calanthe alba
(WS)

Calanthe conspicua Lindley, was named in 1854. The specific epithet is most appropriate as the flowers are highly conspicuous, with their beautiful violet sepals and petals and cream labellum. As the 50mm diameter blooms age they become a beautiful golden yellow. This plant is endemic to the Philippines and is widely distributed throughout the islands, though never common. It is usually found at elevations of between 300 and 1,000 metres.

Left:
Calanthe conspicua
(WS)

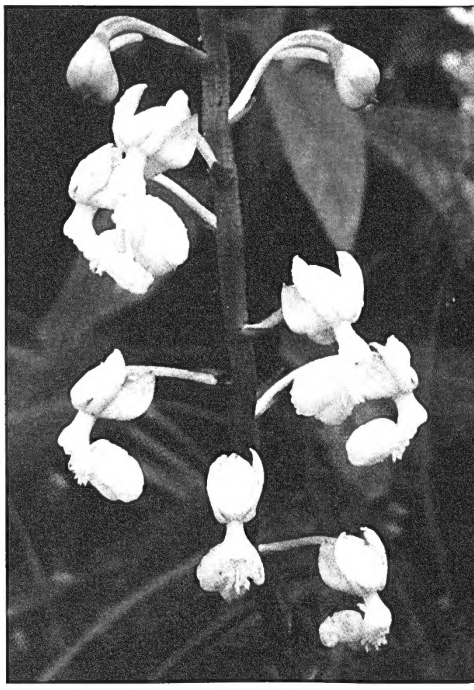


Right and below:
Calanthe conspicua
(JC)

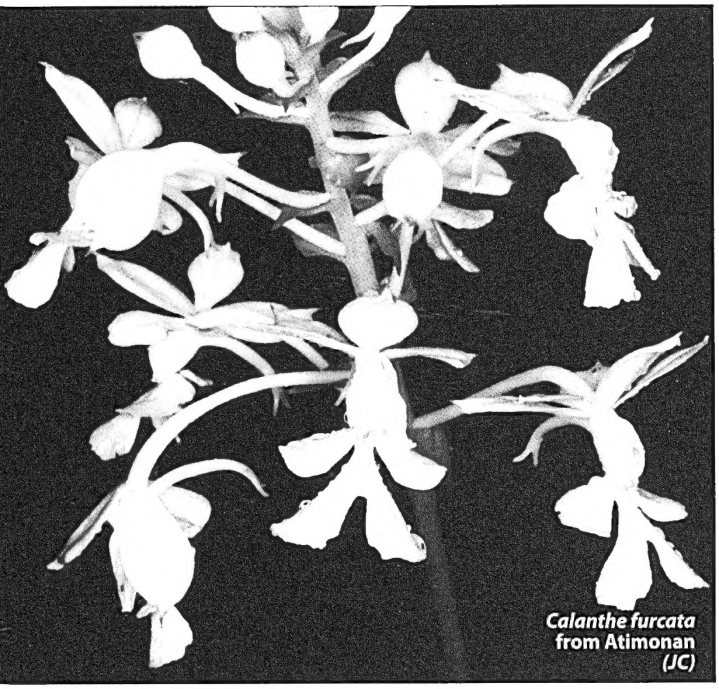
Above: ***Calanthe davaensis*** in situ at Mt. Matutum *(DSB)*

Calanthe davaensis Ames, was named in 1913. The original plants described, were found on Mount Apo, the highest mountain in the Philippines at 2,954 metres. The plants were collected at about 2,000 metres elevation. This species has not been found outside of the large southern island of Mindanao, where it is endemic. The milky-white flowers are about 15mm wide by 22mm high. The inflorescence reaches more than one metre in length.

Right: ***Calanthe davaensis*** Mt. Matutum *(DSB)*



Calanthe furcata Bateman *ex* Lindley, was first named by Bateman but the original description was inadequate. Dr. John Lindley made a more detailed description in the *Botanical Register* in 1838. This endemic species is probably the most widely distributed member of the genus in the Philippines. It can be readily distinguished from its relatives, by the forked apex to the curving spur. The sepals and petals do not reflex. The blooms are about 25mm in diameter.



Calanthe furcata from Atimonan *(JC)*

Calanthe furcata *(GYG)*

Calanthe furcata from Mindoro *(JC)*

Calanthe furcata and crab spider *(JC)*

Calanthe lacerata Ames, was named in 1912. The specific epithet refers to the edges of the labellum which appear as if they have been chewed. The 15mm diameter flowers, which open milky-white in colour, turn a golden yellow as they age. This endemic species is rarely seen, and is only known from a couple of very distant localities, where it grows at elevations of between 1,000 and 2,500 metres.

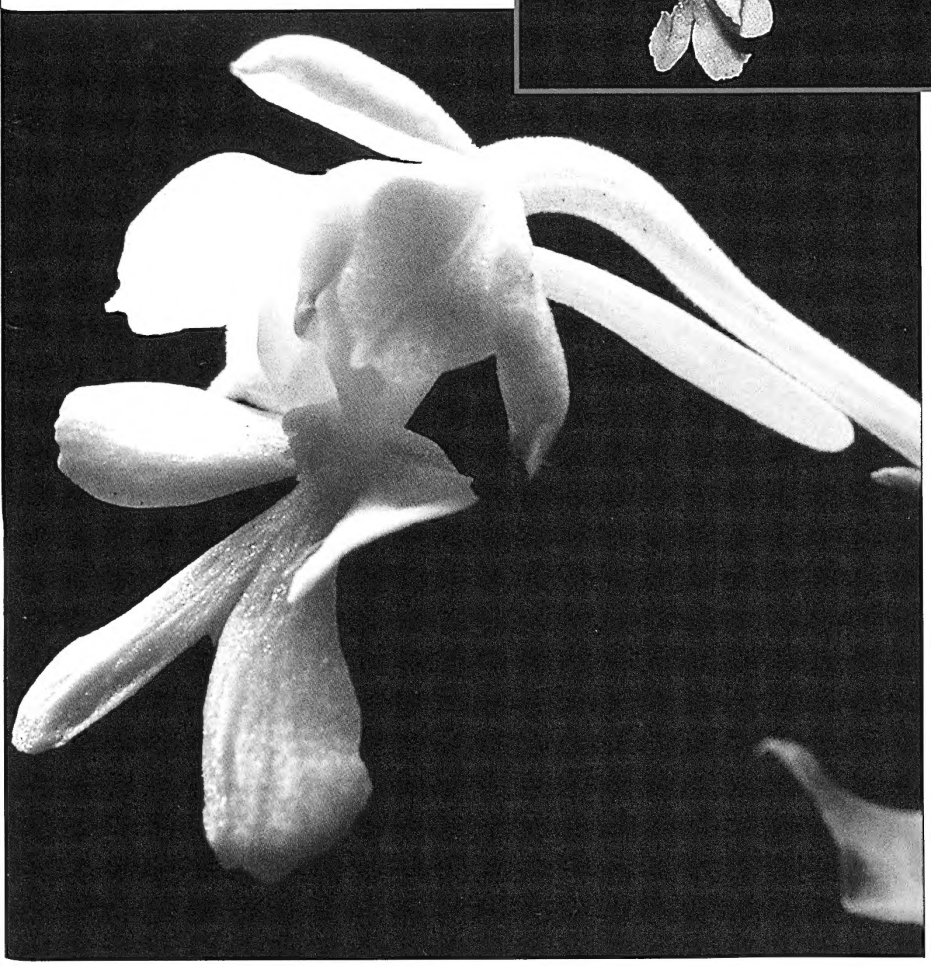
Left:
Calanthe lacerata
(UF)

Below:
Calanthe lacerata
(UF)

Calanthe mcgregorii Ames, was named in 1907. This species could be confused with *Calanthe furcata*, but it differs in the short, straight, cylindrical spur, and the yellow marking at the junction of the lobes on the labellum. The sepals and petals also reflex. The blooms are about 15mm in diameter. Also endemic it is found throughout the archipelago at elevations of about 300 metres.

Right:
Calanthe mcgregorii
(WS)

Below:
Calanthe mcgregorii
(NTG)



Calanthe mindorensis Ames, was named in 1907 from specimens collected on the island of Mindoro, an island just south of Luzon. This is one of the most spectacular species in the genus with flowers about 30mm in diameter. The sepals and petals are pale violet, while the large labellum is a beautiful feature of this species. At this time it is only known from the mountains of northern Mindoro, where it is endemic. It grows at elevations of about 700 metres.

Below:
Calanthe mindorensis
(JC)

Above:
Calanthe mindorensis *(RS)*

Right:
Calanthe mindorensis *(RS)*

Section *Styloglossum* (Breda) Schlechter

Calanthe angustifolia (Blume) Lindley, was first named by Dr. Carl Blume as *Amblyglottis angustifolia* in 1825. Dr. John Lindley transferred it to *Calanthe* in 1833. This widespread species has been found in the Malay Peninsula, throughout Indonesia, Borneo, and the Philippines, where it is uncommon. The blooms are about 18mm in diameter. The sepals and petals are white, while the labellum is white to pale yellow, with a bright yellow callus.

Calanthe halconensis Ames, was named in 1907, from plants collected on Mount Halcon, Mindoro's highest peak. The inflorescence reaches about 50 cm in length and bears many 15mm diameter blooms, which are milky-white with a dull orange labellum. The blooms open in succession. This species is endemic to the Philippines but is only known from Mindoro and some of the provinces of Luzon. It grows at elevations of between 700 and 1,300 metres.

Above: *Calanthe angustifolia* *(POB)*

Below: *Calanthe halconensis* *(RS)*

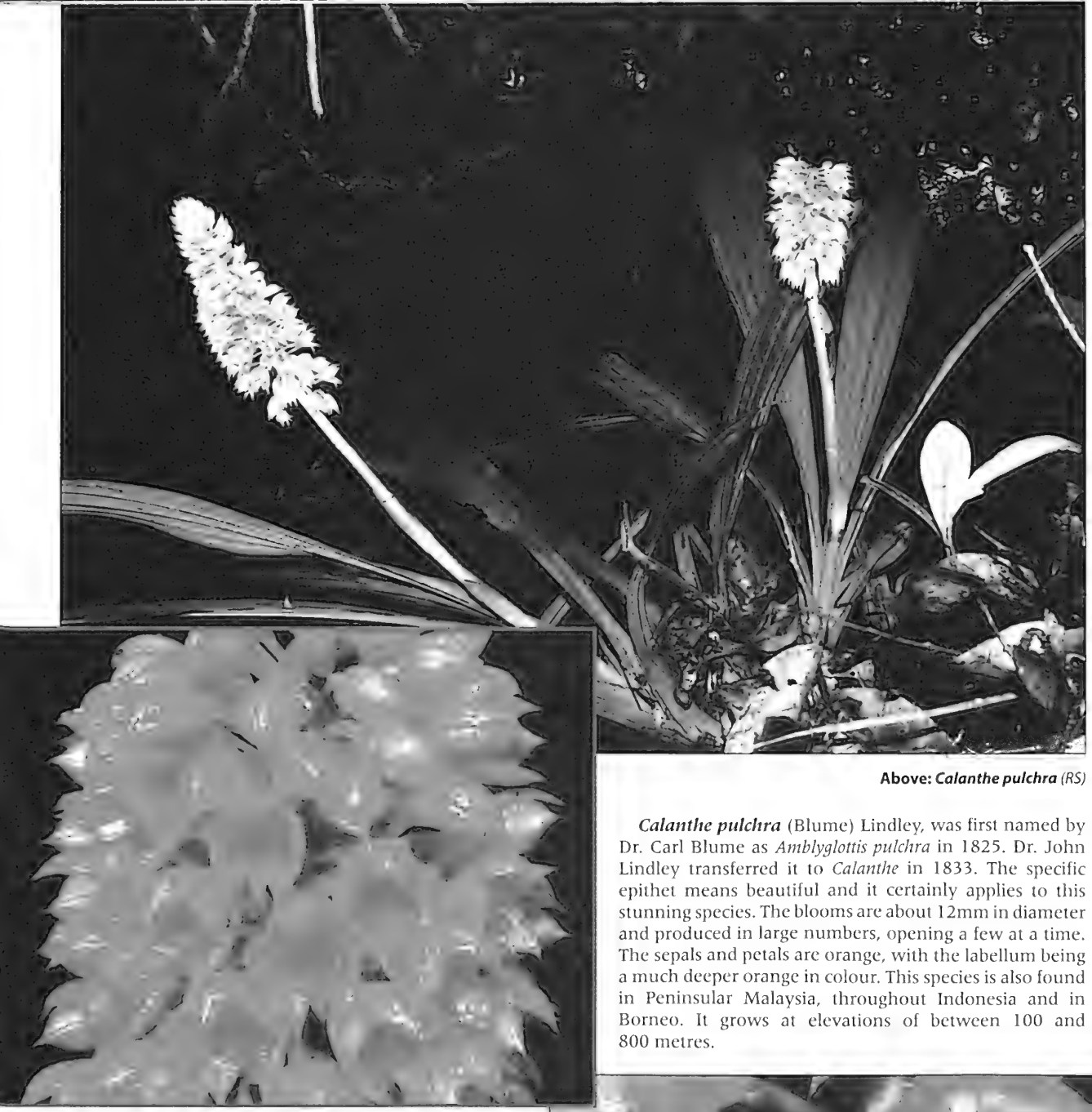
Above and below:
Calanthe lyroglossa
(RS)

Calanthe lyroglossa Reichenbach *f.*, was named in 1878 and is one of the most widely distributed members of this genus. It has been found in Japan, the Ryukyu Islands, Taiwan, and throughout south-east Asia. It is also widely spread throughout the Philippines where it grows at elevations up to 1,100 metres. The bright orange blooms are about 12mm in diameter and have a large bract behind each flower. The clones that have been observed in the Philippines are all self-pollinating.

Right:
Calanthe lyroglossa
(RS)

Above and below: *Calanthe maquilingensis* *(RS)*

Calanthe maquilingensis Ames, was named in 1915, from plants collected on Mount Makiling, about 80 kilometres south of Manila. It has also been found on Mindoro and some of the islands in the central Philippines. The flowers open cream in colour but as they age they turn deep yellow. The upright inflorescence bears many 15mm diameter blooms on the upper one-third, which open successively. This species is another Philippine endemic.

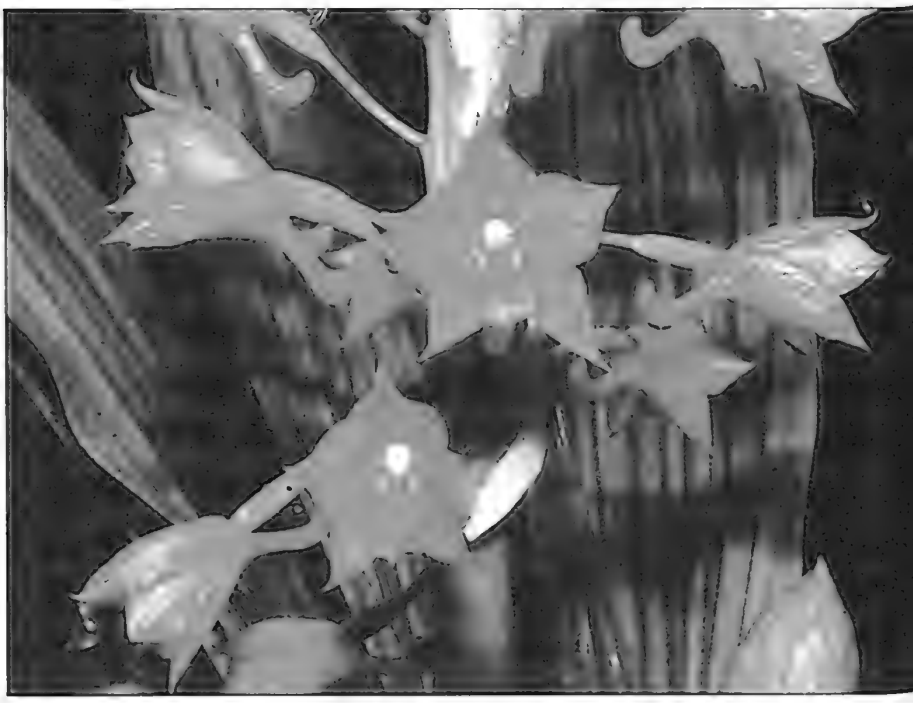


Above: ***Calanthe pulchra*** *(RS)*

Calanthe pulchra (Blume) Lindley, was first named by Dr. Carl Blume as *Amblyglottis pulchra* in 1825. Dr. John Lindley transferred it to *Calanthe* in 1833. The specific epithet means beautiful and it certainly applies to this stunning species. The blooms are about 12mm in diameter and produced in large numbers, opening a few at a time. The sepals and petals are orange, with the labellum being a much deeper orange in colour. This species is also found in Peninsular Malaysia, throughout Indonesia and in Borneo. It grows at elevations of between 100 and 800 metres.

Above and right: ***Calanthe pulchra*** *(RS)*

Above and right:
Calanthe speciosa
(RS)



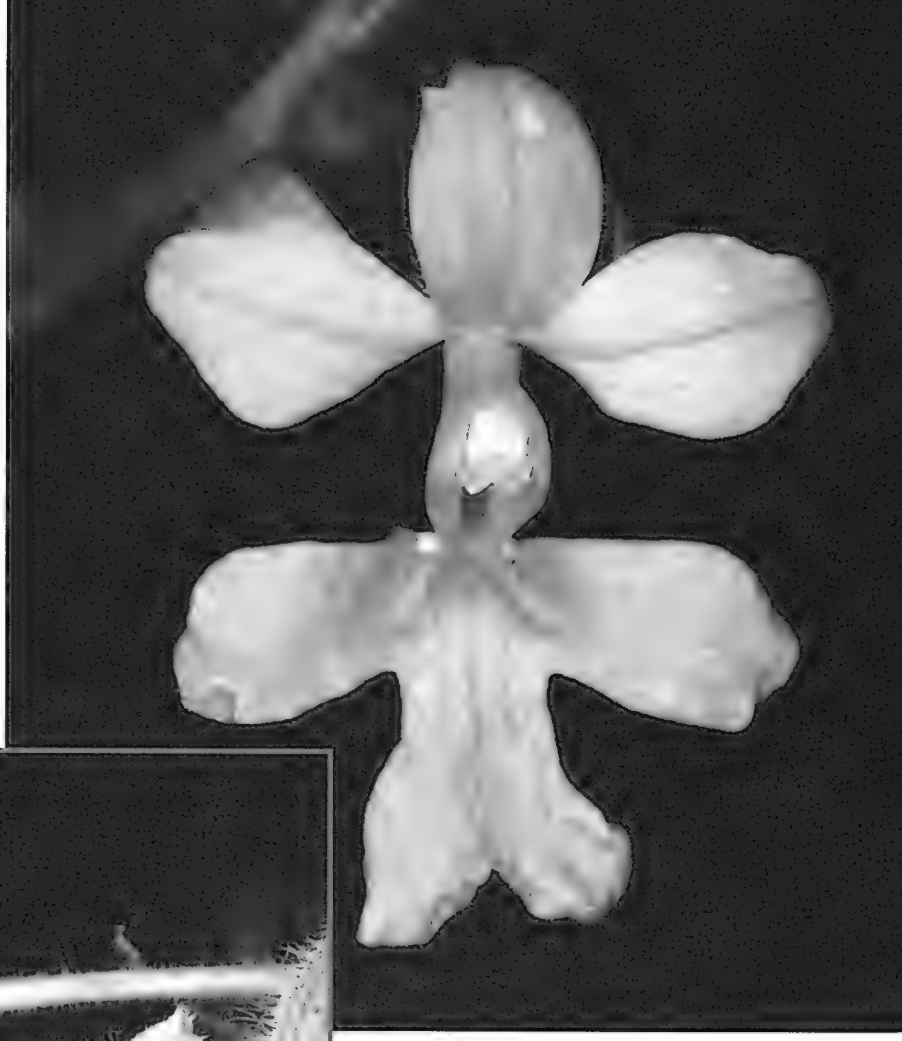
Calanthe speciosa (Blume) Lindley, was first named by Dr. Carl Blume as *Amblyglottis speciosa* in 1825. Dr. John Lindley transferred it to *Calanthe* in 1833. The showy orange to yellow blooms measure 25mm diameter, and are more widely spaced on the inflorescence than those of the previous species. The upright inflorescence is about 75 cm tall. This species is also found in Peninsular Malaysia, throughout Indonesia and in Borneo but at elevations of between 1,000 and 1,500 metres.

Section *Preptanthe* (Reichenbach *f.*) Schlechter has only one section. This subgenus can be defined by the following characteristics: plants with swollen, fleshy pseudobulbs; leaves articulated, deciduous; inflorescence developing from the base of the pseudobulb.

Calanthe hennisii Loher, was named in 1909, in honour of a German nurseryman. This species has distinct, tapering pseudobulbs, which are constricted in the upper one-quarter, bearing 2 to 4 leaves, which are deciduous. The inflorescence is hairy and about 40 cm in length. The beautiful blooms are milky white, with an orange blotch near the opening of the spur. The flowers are about 35mm in diameter. This species is endemic to the Philippines but its distribution is poorly known.

Right:
Calanthe hennisii
(DT)

Calanthe vestita Lindley, was named in 1833. The specific epithet refers to the hairy inflorescence which reaches 60 cm in length. About a dozen flowers appear at the apex and open one or two at a time. The colour is quite variable, ranging from red to pink to pure white. The curving spur is also covered with short white hairs. In the Philippines it is only known from the island of Negros and the province of Davao on Mindanao. It has also been recorded from Vietnam, Myanmar, Thailand, Peninsular Malaysia, Java, Borneo, Ceram and Sulawesi. It grows as a terrestrial at elevations of between 800 and 1,400 metres.



Right:
Calanthe vestita
(JC)

Cultivation

In the wild, these plants are found on the forest floor, growing on thick beds of leaf litter, decomposing logs and even in rocky terrain with organic mulch in the cracks. They thrive on leaf mould and this should be provided in their potting medium.

In cultivation there are two distinct methods for growing these species. This is because a number of the species are deciduous and the remainder are evergreen.

The deciduous species (subgenus *Preptanthe*) have a definite wet and dry season in their habitat. After the deciduous leaves fall in autumn, watering and fertilising should be reduced. Resume watering and fertilising as the new growth appears in the spring.

The evergreen species (subgenus *Calanthe*) are from localities where the annual rainfall is more evenly distributed. These plants have more even year round requirements and the leaves do not fall after the growth has matured.

Left:
Calanthe vestita
(JC)

Above: ***Calanthe vestita*** *(WS)*

Acknowledgments:

Thanks to Dudley Clayton for his assistance with defining the subgenera. Further thanks to the following gentlemen whose images are included here: Danilo S. Balete (*Calanthe davaensis*), Peter O'Byrne (*C. angustifolia*); Ulysses Ferreras (*C. lacerata*); Gary Yong Gee (*C. calanthoides* and *C. furcata*); Ravan Schneider (*C. halconensis, C. lyroglossa, C. maquilingensis, C. mindorensis, C. pulchra* and *C. speciosa*); Wally Suarez (*C. alba, C. mcgregorii* and *C. vestita*); and David Titmuss (*C. hennisii*). Remaining photos taken by the author (JC).

References:

Pridgeon A.M., *et al.*, 2005. ***Genera Orchidacearum*** Vol. 4 Epidendroideae (Part One) Oxford University Press.

Cootes J. 2011. ***Philippine Native Orchid Species***. Katha Publishing, Philippines.

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Vanda luzonica
(photo: Jim Cootes)

The Sad Plight of *Vanda luzonica*

by Wally Suarez

The genus *Vanda* is one of the most horticulturally important orchid genera in the nursery trade. Its species have been in great demand since their introduction amongst the landed gentry, in Victorian England in the mid to late 1800's.

Interest in the members of this genus further expanded in the 1950's when growers from Hawaii and Florida (and later Thailand and Singapore) realised the potential marketability of these plants as horticultural subjects and as cut flowers. As such, the importation of many *Vanda* species, from their native countries, became commonplace, thereby putting great pressure on wild populations.

Among the native *Vanda* species of the Philippines, perhaps the most seriously threatened is *Vanda luzonica*. This plant was formally described by Robert Allen Rolfe in 1915, based on specimens collected by Augustus Loher in the province of Rizal, on the island of Luzon. It has subsequently been found in the provinces of Bulacan and Zambales, also on Luzon.

This species is indeed one of the most striking in the genus, with vigorous, robust stems to 1.5 metres long on mature individuals. The long inflorescences carry large flowers, to 60mm across, with strongly contrasting colours. On really good specimens the blooms are an attractive, rounded shape. This species has its merits, whether used as a hybrid parent or maintained as it is.

Vanda luzonica
(photo: Jim Cootes)

It comes therefore as no surprise that demand for this plant has not waned, even after many decades since its introduction. Sadly, despite being easy to grow and propagate from seed, and through mericloning, a good number of nurseries here in the Philippines and abroad still sell wild-collected plants of this species, and even promote them to prospective buyers as if the origins were meritorious.

That this species is seriously threatened is mirrored by the fact that no plants have been collected, nor seen, in Bulacan and Rizal in the past two decades or so.

Its last stronghold therefore is in Zambales, but what little remains there may not be viable enough to sustain the population.

To gain a better perspective on the magnitude of the exploitation of this species, one can perhaps consider this: earlier this year, I talked to some Aetas (the original native people) in Zambales and they informed me that a guy from Samar orders these plants, in bulk and sells them to nurseries in Manila, who in turn ships them abroad.

For one particular order, around 500 plants were stripped from their native habitat (which often entails cutting down the host trees as their height makes any attempt at climbing them a dangerous proposition), and around two weeks later an additional 200 pieces were received by the same dealer.

What makes matters worse is that according to all people I have spoken to, *Vanda luzonica* no longer exists in the areas where they were used to be found, as even small plants have been gathered long ago already.

From what I have been told, the plants being collected these days came from the most remote areas of the province and that it took weeks of plant-gathering just to meet the 500-piece order placed by the said dealer.

A more tantalising footnote was the mention to me that the additional box of 200 plants that were sold two weeks later was supposed to number at 500 also, but since no more plants can be seen, the dealer had to content himself with less than half of what he originally ordered.

No conservation law, national or international can do something about the plight of *Vanda luzonica*, as well as other horticulturally desirable plants, as long as greed and apathy is the driving force in unscrupulous traders' businesses and permit-giving bodies are familiar with the names but unfamiliar with the appearance of the plants.

It is not difficult to imagine how such large-scale collection on the part of dealers, the utter lack of knowledge of those who work with the law, and the absence of protection measures, can drive the extinction of this Philippine endemic in the wild.

I do not know of any population study that has ever been undertaken with regards to this species, but pretty soon there may be nothing more to count. Thanks to Jim Cootes for the use of his photographic images used with this note. ■

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Email: ayi_boy12@yahoo.com

Vanda luzonica
(photo: Jim Cootes)

The Characterisation of *Diuris laxiflora* Lindl. and the description of Four New Allied Species from Western Australia

by David L. Jones & Christopher J. French

Abstract

Diuris laxiflora Lindley from Western Australia is characterised and four allied taxa (*D. septentrionalis*, *D. segregata*, *D. insignis* and *D. decrementa*) are described as new.

Key Words

Orchidaceae, *Diuris septentrionalis*, *Diuris segregata*, *Diuris insignis*, *Diuris decrementa*, new species, *Diuris laxiflora* Lindley, Western Australia, Australian flora.

Introduction

Field studies over several years have shown that the taxon widely accepted as *Diuris laxiflora* Lindl. is extremely variable and actually consists of six species, four described here as new.

Methods

This study is based on field observations and morphological examination of fresh flowers collected from localities in south-western Western Australia. Herbarium collections (spirit and dried) have been examined from the following herbaria (AD, CANB, MEL and PERTH). Type specimens or photographs of types of all pertinent described taxa have been examined. Measurements given in descriptions are from living plants. Notes on distribution, habitat (particularly soil, and plant associations) and conservation status were derived from our own field studies and discussions with Andrew Brown.

Taxonomic History

Diuris laxiflora was described by John Lindley in 1840 in the *Swan River Appendix* of Edwards's *Botanical Register*. Lindley used specimens collected by James Drummond in 1839 as the type for *D. laxiflora*. The type locality given for the species is 'Swan River' a vague and all-encompassing western locality often cited in early papers (Clements 1989). Examination of photographs of the type collection, housed in the Lindley Herbarium Kew, showed that the specimens match the relatively robust form of the species that grows in the vicinity of Perth. Lindley also described *Diuris carinata* in 1840 (this time in his book *Genera and Species of Orchidaceous Plants*), another species with strong affinities to *D. laxiflora*. Again specimens collected by Drummond in 1839 and also from the locality of 'Swan River' were used as the type. Examination of the type specimens of *D. carinata* shows this species to be much more robust and larger-flowered than *D. laxiflora*. Although not included directly in this paper, *D. carinata* is characterised by tall habit (to 80cm tall), large bright yellow flowers (25-35mm across) with bold dark reddish to reddish-brown markings, large labellum (15-18mm long, 12-14mm wide) with large spreading lateral lobes and broadly ovate midlobe. *Diuris immaculata*, a third species in the complex was described by David Jones in 2006. This species is readily recognised by its unspotted golden yellow flowers and green sepals (Jones 2006).

Taxonomy

1. *Diuris laxiflora* Lindley in Edwards's, *Bot. Reg.* 1-23: *Swan Riv. Append.* Li (1840). Type: Swan River, 1839, *J. Drummond* s.n. (lecto K-L (photo seen), isolecto BN, Fl, K).

Description: *Leaves* two to five, narrowly linear, convolute, 15-30cm long, 2-3.5mm wide. *Scape* 30-80cm tall, one-six-flowered. *Pedicels* 15-60mm long, filiform. *Flowers* porrect to semi-nodding, 25-35mm long, 20-25mm across, yellow with dark red markings on the dorsal sepal, petals (sometimes uniformly yellow) and labellum. *Dorsal sepal* obliquely erect, narrowly ovate to narrowly elliptic, 7-13mm long, 5.5-8mm wide, obtuse, a red basal blotch and a smaller apical blotch usually prominent, marginal blotches often also present. *Lateral sepals* parallel or crossed at the apex, 10-14mm long, 2-3.5mm wide when flattened, subacute to acuminate. *Petals* obliquely erect, paddle-shaped; laminae 7-12mm long, 6-10mm wide, elliptic to transversely ovate or nearly circular; claw 3-5mm long, red-brown, straight or curved. *Labellum* obliquely decurved, 8-12mm long, three-lobed; lateral lobes widely divergent, asymmetrically oblong, 4-7mm long, 2-3mm wide, a red basal blotch prominent; *mid-lobe* broadly cuneate, margins recurved, 7-11mm long, 8-12mm wide, apex broadly obtuse, distal margins often heavily marked with red. *Labellum callus* consisting of two smooth ridges outlined with red, confined to the basal third of the lamina. *Column* c. 3.5mm long, c. 2mm wide. *Column wings* narrowly lanceolate, margins irregular, c. 3.5mm long, c. 1mm wide. *Anther* narrowly ovate, dorsal surface with a red blotch, c. 3mm long, c. 1.3mm wide. *Pollinarium* c. 2.3mm long, c. 1.5mm wide, white. *Stigma* elliptical, c. 1.5mm long. *Capsules* ellipsoid, 1.5-2mm long, 0.6-0.9mm wide.

Distribution and Ecology: In the Darling Range System, more or less from Gin Gin through York and including areas around Perth, extending south in a broad band to the east of

Albany and along the coast to Esperance. Grows in a range of habitats but especially winter wet flats, swamp margins and drainage lines. Flowers without fire, but flowering is strongly enhanced after a burn. Flowering September and October.

Recognition: Characterised by tall habit (plants to 50cm tall) and large flowers well-separated in the raceme with a broad mid-lobe on the labellum (obvious when flattened).

Notes: Although often considered to be an undescribed taxon, this species matches the type collection of *D. laxiflora* which is housed in the Lindley Herbarium at Kew. The species commonly attributed to *D. laxiflora* (e.g. Hoffman & Brown 2011) is described as *D. decrementa* in this paper. *Diuris carinata* also has similarities with *D. laxiflora* but is even more robust (plants to 80cm tall) with larger boldly marked bright yellow flowers and a large labellum with large spreading lateral lobes and broadly ovate midlobe.

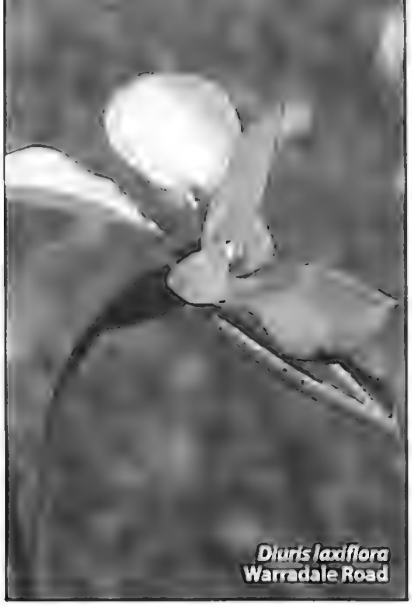
Diuris laxiflora
Dale Creek

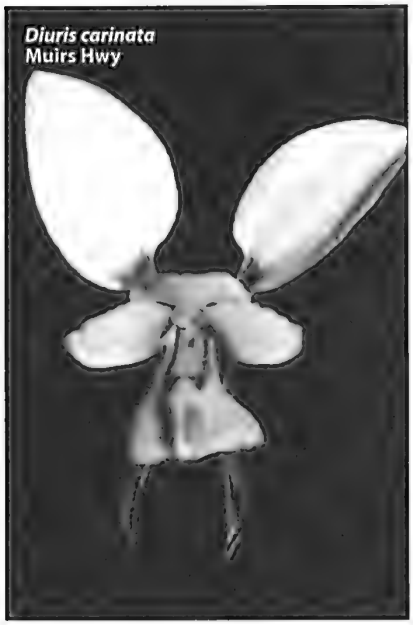
Diuris laxiflora
Serpentine River

Diuris carinata
Collie - Williams Road


Diuris laxiflora
Darkan Swamp


Diuris laxiflora
Serpentine River


Diuris laxiflora
Warradale Road


Diuris carinata
Muirs Hwy


Diuris carinata
Collie - Williams Road


Diuris carinata
Collie - Williams Road


Diuris immaculata
Coolingup NR


Diuris immaculata
Coolingup NR

2. *Diuris septentrionalis* D.L.Jones & C.J.French **sp. nov.**, with affinity to *Diuris laxiflora* Lindley but distinguished by its more northerly distribution and generally larger, paler flowers (cream to pale yellow with red markings). It also has affinity to *D. segregata* D.L.Jones & C.J.French (described as new below), with which it can be sympatric, differing by its taller habit and larger flowers.

Type: Western Australia. Giles District. Bundara Nature Reserve, 21 Sep. 2001, *C.J.French 3046* (holo CANB 648339).

Illustrations: Page 404, Hoffman & Brown (1998) – as *Diuris* aff. *laxiflora*; page 483, Hoffman & Brown (2011) – as *Diuris* sp. 'northern'.

Description: *Leaves* two or three, linear, convolute, 8-20cm long, 1.8-2.2mm wide. *Scape* 18-34cm tall, one-five-flowered. *Pedicels* 20-40mm long, very slender. *Flowers* porrect to semi-nodding, 22-30mm long, 12-16mm across, cream to pale yellow, the sepals and labellum darker than the petal laminae, red markings on the dorsal sepal and labellum. *Dorsal sepal* obliquely erect, ovate to elliptic, 10-15mm long, 5-7mm wide, obtuse, a large red basal blotch and a smaller apical blotch prominent, two marginal blotches near the base often also present. *Lateral sepals* parallel or crossed at the apex, 10-18mm long, 1-3mm wide when flattened, subacute to acuminate. *Petals* obliquely erect, paddle-shaped; laminae 8-13mm long, 5-9mm wide, elliptic to transversely ovate or nearly circular; claw 3-6mm long, red-brown, straight or curved. *Labellum* obliquely decurved, 8-14mm long, three-lobed; lateral lobes widely divergent, asymmetrically oblong, 4-7mm long, 2-4.5mm wide, a red basal blotch prominent; *mid-lobe* broadly cuneate to obcordate, margins recurved, 8-12mm long, 7-10mm wide, apex subacute to broadly obtuse, distal margins often marked with red. *Labellum callus* consisting of two smooth ridges outlined with red, confined to the basal third of the lamina. *Column* 3.5-3.8mm long, c. 2mm wide. *Column wings* lanceolate, margins irregular, c. 3.5mm long, c. 1.3mm wide. *Anther* ovate, c. 3.3mm long, c. 2mm wide, mostly red. *Pollinarium* c. 2.5mm long, c. 1mm wide. *Stigma* oblong-elliptical, c. 2mm long, c. 1mm wide. *Capsules* ellipsoid, 1.8-2.2mm long, 0.6-1.2mm wide.

Distribution and Ecology: From Regans Ford north to areas inland from Kalbarri. Grows in winter wet soils in medium to tall shrubland. Soils are largely shallow brown loam over laterite. Flowers freely without fire, but flowering may be enhanced after a burn. Flowering mid August and September.

Recognition: Characterised by tall habit and large pale yellow flowers. The only other member of the *D. laxiflora* complex to grow in the vicinity is *D. segregata* which is also described as new in this paper. It is shorter with smaller flowers and also begins flowering earlier than *D. septentrionalis*.

Conservation status: Widespread and conserved.

Notes: *Diuris septentrionalis* often grows in tufts of closely crowded plants. It has been referred to as the "Northern Bee Orchid" (Hoffman & Brown 2011).

Etymology: The Latin *septentrionalis*, north, northern, in reference to the northerly distribution of this species.


Diuris septentrionalis
Yerina Springs Road


Diuris septentrionalis
Jurien Bay Road


Diuris septentrionalis
Yerina Springs Road


Diuris septentrionalis
Port Gregory Road

3. *Diuris segregata* D.L.Jones & C.J.French **sp. nov.**, with affinity to *Diuris laxiflora* Lindley but distinguished by its more northerly distribution, shorter habit and smaller, paler flowers (pale yellow with dark red markings). It also has affinity to *D. septentrionalis* D.L.Jones & C.J.French (described as new above), with which it can be sympatric, differing by its shorter habit and smaller flowers.

Type: Western Australia. Giles District. Yerina Springs Road, 29 Aug. 2004, *C.J.French 5729* (holo CANB 653924).

Illustration: Page 486, Hoffman & Brown (2011) – as *Diuris* sp. 'Northampton'.

Description: *Leaves* two to six, narrowly linear to filiform, convolute, 6-15cm long, 1-1.5mm wide. *Scape* 10-20cm tall, one-three-flowered. *Pedicels* 10-30mm long, filiform. *Flowers* porrect to semi-nodding, 10-15mm long, 9-11mm across, pale yellow, dark red markings on the dorsal sepal, petals (sometimes uniformly yellow) and labellum. *Dorsal sepal* obliquely erect, narrowly ovate to narrowly elliptic, 7-10mm long, 3.5-5.5mm wide, obtuse, a red basal blotch and a smaller apical blotch usually prominent, marginal blotches often also present. *Lateral sepals* parallel or crossed at the apex, 8-13mm long, 1-3mm wide when flattened, subacute to acuminate. *Petals* obliquely erect, paddle-shaped; laminae 6-9mm long, 4-8mm wide, elliptic to transversely ovate or nearly circular; claw 3-5mm long, red-brown, straight or curved. *Labellum* obliquely decurved, 7-11mm long, three-lobed; lateral lobes widely divergent, asymmetrically oblong, 3.5-7mm long, 2-3mm wide, a red basal blotch prominent; *mid-lobe* broadly cuneate, margins recurved, 6-8.5mm long, 6-8.5mm wide, apex subacute to broadly obtuse, distal margins often heavily marked with red. *Labellum callus* consisting of two smooth ridges outlined with red, confined to the basal third of the lamina. *Column* c. 2.7mm long, c. 1.8mm wide. *Column wings* narrowly lanceolate, falcate, c. 2.8mm long, c. 0.8mm wide. *Anther* ovate, c. 2.3mm long, c. 1.2mm wide, with a dark red dorsal blotch. *Pollinarium* c. 2mm long, c. 1mm wide. *Stigma* elliptical, c. 2mm long, c. 0.8mm wide. *Capsules* not seen.

Distribution and ecology: Between Eneabba and Kalbarri. Grows on winter wet flats and around the margins of ephemeral lakes. The vegetation ranges from open grassy areas to low shrubland. Soils include shallow brown loam over laterite and brown clay loam. Flowers freely without fire, but flowering may be enhanced after a burn. Flowering early August and September.

Recognition: Characterised by short habit and small pale yellow flowers with dark red markings. The only other member of the *D. laxiflora* complex to grow in this area is *D. septentrionalis* which is taller with larger flowers. It also begins flowering later than *D. segregata*.

Conservation status: Widespread and conserved.

Notes: *Diuris segregata* sometimes grows sympatrically with *D. septentrionalis* but hybrids are unknown. Like that species, it also often grows in tufts of crowded plants. It has been referred to as the "Northampton Bee Orchid" (Hoffman & Brown 2011).

Etymology: The Latin *segregatus*, separate, set apart, in reference to its differences from *Diuris septentionalis* which also grows in the area.


Diuris segregata
008 Port Gregory Road


Diuris segregata
Yerina Springs Road


Diuris segregata
Yerina Springs Road


Diuris segregata
Yerina Springs Road

4. *Diuris insignis* D.L.Jones & C.J.French **sp. nov.**, with affinity to *Diuris laxiflora* Lindley but distinguished by later flowering period and smaller, much more heavily marked flowers. It also has affinity to *D. decrementa* D.L.Jones & C.J.French (described as new below), differing by its taller habit and larger, much more heavily marked flowers.

Type: Western Australia. Muirs Highway, 17 km west of Frankland River crossing, 9 Oct. 1985, *D.L.Jones 2152* (holo CANB 668576, iso AD, MEL, NSW, PERTH).

Illustration: Page 480, Hoffman & Brown (2011) – as *Diuris* sp. 'Muir Highway'.

Description: *Leaves* two to six, narrowly linear to filiform, convolute, 6-15cm long, 1-2mm wide. *Scape* 20-40cm tall, one-five-flowered. *Pedicels* 10-50mm long, filiform. *Flowers* porrect to semi-nodding, 15-20mm long, 15-20mm across, yellow with numerous dark red markings on most parts. *Dorsal sepal* obliquely erect, narrowly ovate to narrowly elliptic, 8-13mm long, 4.5-8.5mm wide, obtuse, a red basal blotch and a smaller apical blotch usually prominent, broad marginal blotches often also present. *Lateral sepals* parallel or crossed at the apex, 9-14mm long, 1.5-3mm wide when flattened, subacute to acuminate. *Petals* obliquely erect to recurved, paddle-shaped; laminae 6-10mm long, 5-9mm wide, elliptic to transversely ovate or nearly circular; claw 3-5mm long, red-brown, straight or curved. *Labellum* obliquely decurved, 7-11mm long, three-lobed; lateral lobes widely divergent, asymmetrically oblong, 5-7mm long, 2-4mm wide, a red basal blotch prominent; *mid-lobe* broadly cuneate to transversely obcordate, margins recurved, 7-10.5mm long, 7-10.5mm wide, apex broadly obtuse, distal margins often heavily marked with red. *Labellum callus* consisting of two smooth ridges heavily stained with dark red, confined to the basal third of the lamina. *Column* c. 3.2mm long, c. 2mm wide. *Column wings* narrowly lanceolate, c. 3.5mm long, c. 0.8mm wide, margins irregular. *Anther* narrowly ovate, dark red, c. 2.8mm long, c. 1.2mm wide. *Pollinarium* c. 1.8mm long, c. 1.3mm wide, white. *Stigma* elliptical, c. 1.3mm long. *Capsules* ellipsoid, not seen.

Distribution and ecology: Found in regions along the Muirs Highway more or less between Strachan and areas to the east of Rocky Gully, extending north to the vicinity of Tonebridge. Grows in moist grassland verging on swamp. Flowers freely without a fire. Flowering October and early to mid November.

Recognition: Characterised by relatively large yellow flowers heavily marked and banded with dark red-brown. Distinguished from *D. decrementa* by its later flowering period, taller habit and larger boldly marked flowers. *Diuris laxiflora* is taller again than *D. insignis* and with larger flowers.

Conservation status: Relatively narrowly distributed but conserved.

Notes: *Diuris insignis* tends to grow singly in scattered colonies. It has been referred to as the "Dark Bee Orchid" (Hoffman & Brown 2011).

Etymology: The Latin *insignis*, remarkable, notable, in reference to the colourful flowers with bold markings.

Diuris insignis
Lake Muir

Diuris insignis
Tone Bridge

Diuris insignis
Quindanning - Pinjarra Road

Diuris insignis
Unicup Road

5. *Diuris decrementa* D.L.Jones & C.J.French **sp. nov.**, with affinity to *D. laxiflora* Lindley but distinguished by the short habit and much smaller flowers. It also has affinities with *D. micrantha* D.L.Jones, with which it can be sympatric, but differs by a much shorter habit and larger flowers.

Type: Western Australia. Roe District. 1.6 km north of Gibson, 12 Oct. 1993, *D.L.Jones 12293* (holo CBG 9710258, iso AD, MEL, NSW, PERTH).

Description: *Leaves* two to five, narrowly linear to filiform, convolute, 5-12cm long, 1-1.5mm wide. *Scape* 8-30cm tall, one-three-flowered. *Pedicels* 10-30mm long, filiform. *Flowers* porrect to semi-nodding, 10-13mm long, 8-11mm across, yellow with dark red markings on the dorsal sepal, petals (sometimes uniformly yellow) and labellum. *Dorsal sepal* obliquely erect, narrowly ovate to narrowly elliptic, 7-10mm long, 3.5-5.5mm wide, obtuse, a red basal blotch and a smaller apical blotch usually prominent, marginal blotches often also present. *Lateral sepals* parallel or crossed at the apex, 8-13mm long, 1-3mm wide when flattened, subacute to acuminate. *Petals* obliquely erect, paddle-shaped; laminae 6-9mm long, 4-8mm wide; elliptic to transversely ovate or nearly circular; claw 3-5mm long, red-brown, straight or curved. *Labellum* obliquely decurved, 7-10mm long, three-lobed; lateral lobes widely divergent, asymmetrically oblong, 3.5-6mm long, 2-3mm wide, a red basal blotch prominent; mid-lobe broadly cuneate, margins recurved, 6-9mm long, 7-11mm wide, apex subacute to broadly obtuse, distal margins often heavily marked with red. *Labellum callus* consisting of two smooth ridges outlined with red, confined to the basal third of the lamina. *Column* c. 2.5mm long, c. 1.8mm wide. *Column wings* narrowly lanceolate, c. 2.5mm long, c. 0.5mm wide, margins irregular. *Anther* narrowly ovate, c. 2.3mm long, c. 1.5mm wide, dorsal surface marked with red. *Pollinarium* c. 1.8mm long, c. 1mm wide. *Stigma* ellipsoid, c. 1.3 mm long, c. 1mm wide. *Capsules* not seen.

Distribution and ecology: Widely distributed in southern parts of the lower South-west from south of Mandurah to east of Esperance. Grows in moist areas of heath, white gum flats, margins of winter wet swamps and in moss pads on the margins of granite domes. Soils include shallow loam over limestone, heavy brown clay and lateritic brown loam. Flowers freely without fire. Flowering September and October.

Recognition: Characterised by short habit and small yellow flowers with red markings. It has been confused with *D. laxiflora* but can be readily distinguished by the short habit and much smaller flowers. In a few localities it is sympatric with *D. micrantha* which is readily distinguished by its much taller habit and even smaller flowers.

Conservation status: Widespread and conserved.

Notes: A common species that often grows in extensive colonies.

Etymology: The Latin *decrementum*, diminishing, lessening, in reference to the short habit and small flowers of this species.

Acknowledgements

We thank Jean Egan for preparing the drawings for publication, Andrew Brown for bringing some of the species to our attention and furnishing specimens for illustration, Barbara Jones, Garry Brockman, Nye Evans and the late Bill Jackson for companionship on field trips, Mark Clements for discussions and access to photos of type specimens, Marion Garrett and Karina Richards for technical assistance.

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Diuris derramenta
Tenterden Reserve


Diuris decrement
Nyabing - Katanning Road


Diuris decrementa
Beaumont NR

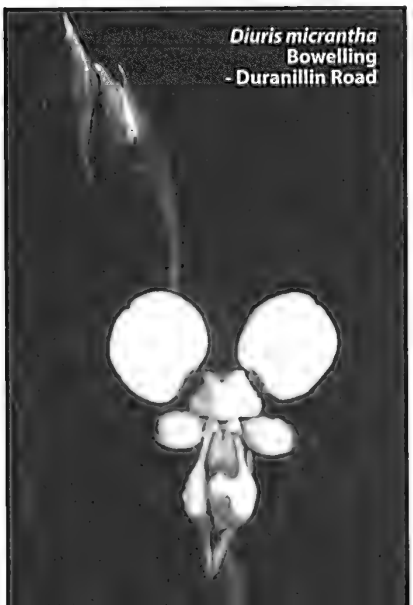

Diuris decrementa
Boyatup Hill

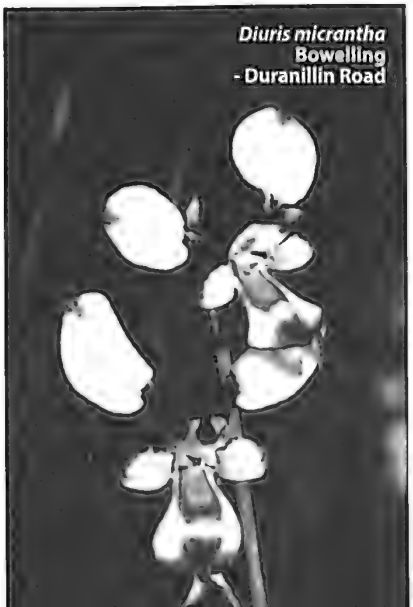

Diuris decrementa
Burdett Backman Road


Diuris decrementa
Springdale Road


Diuris decrementa
Wambellup NR


Diuris decrementa
Wambellup NR


Diuris micrantha
Bowelling
- Duranillin Road


Diuris micrantha
Bowelling
- Duranillin Road


Diuris micrantha
Yalgorup NP

New Zealand Summer Orchid Show

Text and photos by David Banks

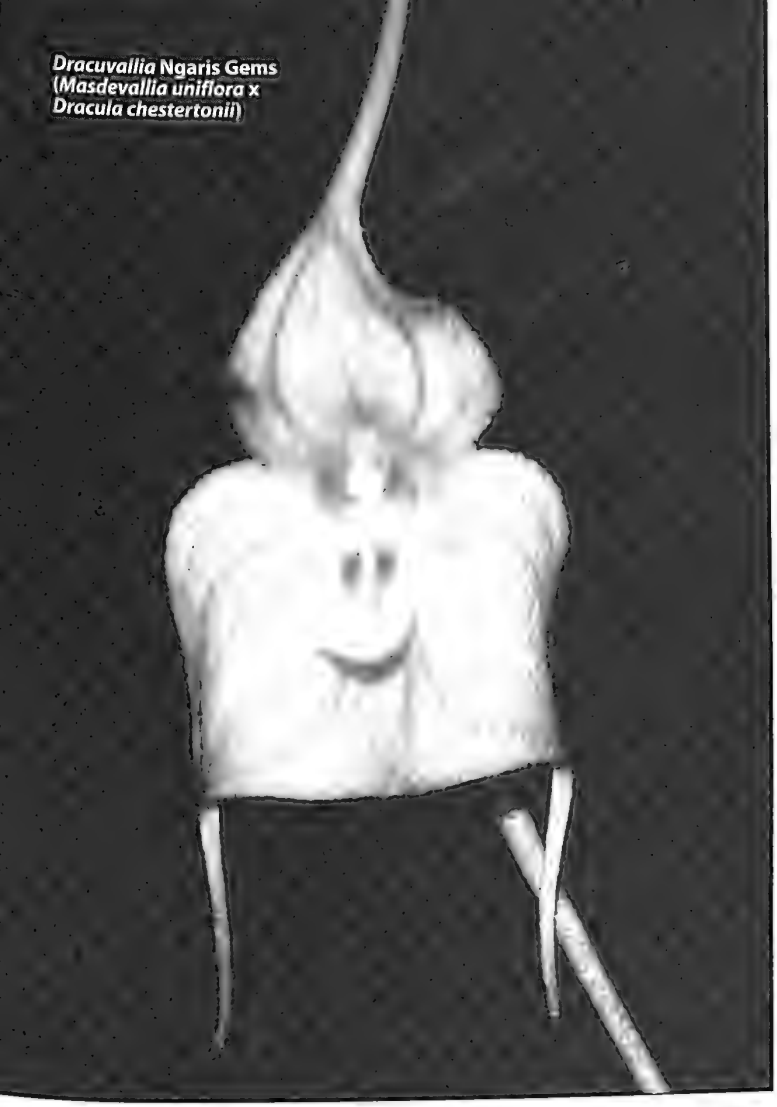
The Taranaki Orchid Society holds their annual Summer Orchid Show during January in New Plymouth on the North Island of New Zealand. This has been running very successfully over many years, and is as much a social gathering as it is a fine orchid show with a wide range of species and hybrid orchids on display.

New Plymouth has an outstanding climate for plants, which appears to be in a perpetual spring. They do get the odd snowfall in winter, but the garden plants and cultivated orchids are just a picture of health. I have always been a believer that the extreme heat of summer does more damage to our orchids than cold, and I think this climate confirms this.

My family was invited to attend, and I gave a number of presentations over the weekend, as well as judging and after-dinner speaker duties. Andrew and Catherine Locke (from ANOS Sydney Group) also joined us for this weekend, and touring of the picturesque North Island the following week.

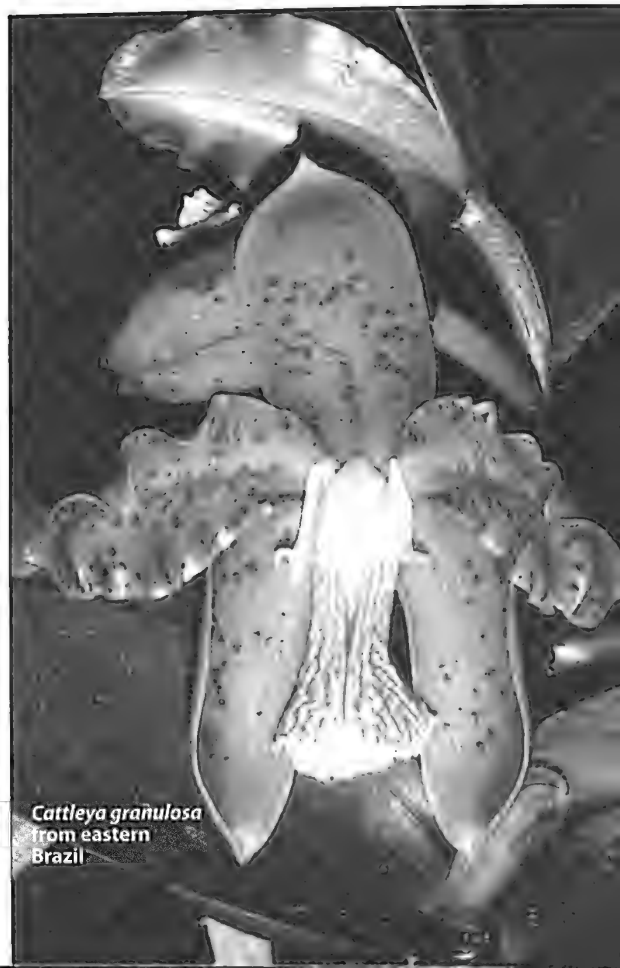
After the Friday set up and Saturday morning judging of the orchid show, the visitors were able to view the delights on display. Apart from the show itself, there were numerous activities planned. There was an extensive "Car Boot" sale of orchids and sundries that transformed the Hall's car park. There was a wide range of quality and well grown orchids for sale, at very reasonable prices, to the point of being cheap!

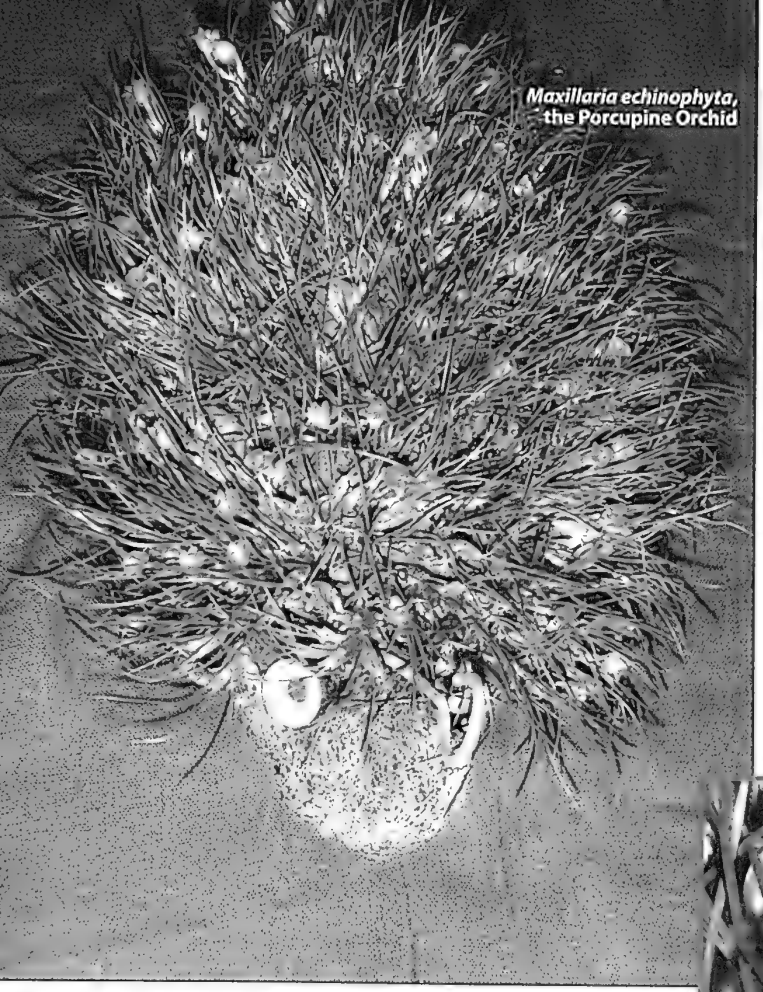
Over the weekend there were a number of formal lectures on various orchids, covering a range of topics with a heavy focus on cultivation. I also attended the CSA discussion on Cymbidiums, as well as two afternoon sessions co-ordinated by the "Disa Group" and the "Odontoglossum Group". Whilst I don't personally grow those groups of orchids, I found the discussion very educational and stimulating, and I certainly learnt a lot in a very friendly and sharing environment.


Dracuvallia Ngaris Gems
(*Masdevallia uniflora* x
Dracula chestertonii)


Epidendrum Mona Park


Hamelwellsara
Kiwi Chocolate


Cattleya granulosa
from eastern
Brazil



Maxillaria echinophyta, the Porcupine Orchid

Attendance of all of these events and activities was covered by the one modest registration fee.

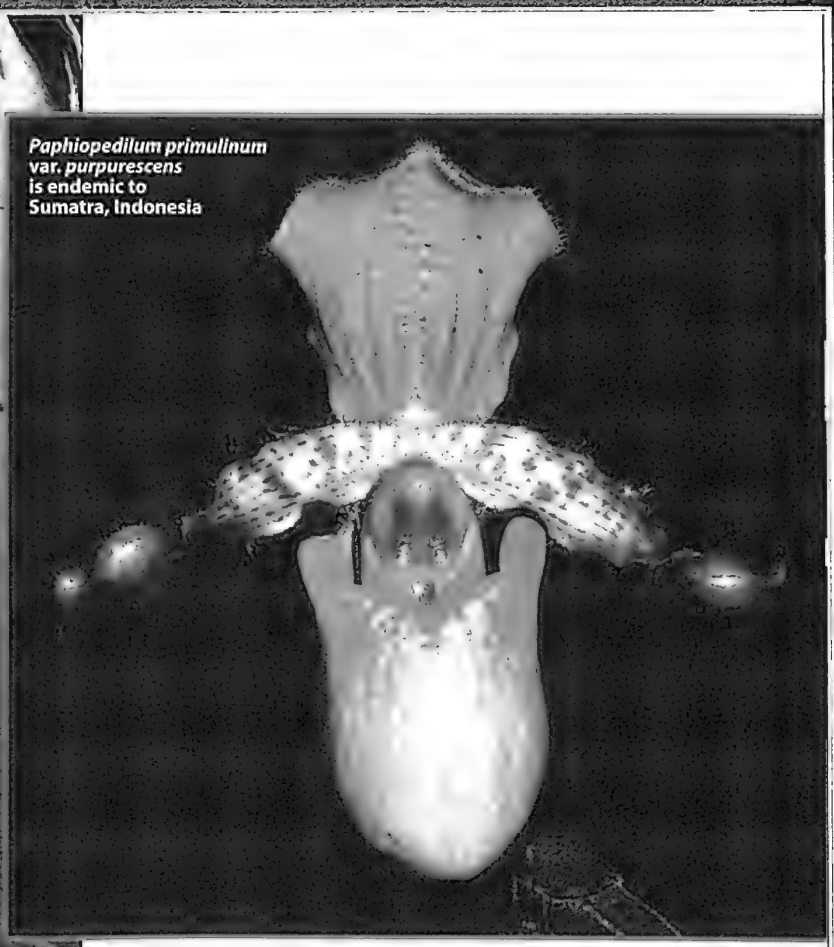
The evening meal was held at the Highlands Intermediate School Hall, also the show venue. Close to 100 people attended, having converged from throughout New Zealand. We have been fortunate to have made many repeat visits to New Zealand over the past decade, and have made many friends there during this time. It was great that so many of them were also able to attend this event. After the dinner, we were treated to a guided night-time tour through Pukekura Park, marvelling at the wonderful and creative light displays that have become a popular tourist attraction.

An orchid special to Taranaki made its debut at the show. A new spectacular red hybrid called *Disa* Pukekura Park was unveiled in its first official showing since it was registered with the RHS in 2010. It was bred by NZ orchid expert and former Pukekura Park curator, George Fuller MBE. George is a master plant grower as well as being a *Masdevallia* and *Disa* specialist. He used to grow all his *Disa* in sphagnum moss, but has now switched over to the fine grade of Kiwi Orchid Bark (Radiata Pine) with outstanding results. This indeed surprised me. Mind you, I think George could grow his orchids in crushed glass and still succeed!

Maxillaria echinophyta, from Brazil is closely related to *M. seidelii*

Galeandra macroplectra is from Venezuela and Colombia

Grobya amherstiae is native to Ecuador



Paphiopedilum primulinum var. *purpurescens* is endemic to Sumatra, Indonesia

Vanda Kekasih is bred from the cool-growing *Vanda cristata*

Inobulbon munificum is a rare *Dendrobium* relative from New Caledonia

Dendrobium pseudoglomeratum from the highlands of Papua New Guinea

Dendrobium victoriae-reginae is one of the blue orchids, from the Philippines

Dendrobium (Mountain Magic x *glomeratum*) *cuthbertsonii* background

In fact the Disas were the stars of the show. It was clearly the best display I have ever seen of these South African deciduous terrestrial orchids. George has been at the forefront of their breeding, both for showbench types as well as propagating rare species and unusual colour forms. The variation, quality and size of many of these new *Disa* hybrids have to be seen to be believed! One of George's projects has been improving the "albino" or more correctly xanthic colour forms of *Disa uniflora*. The original plants of this rare colour morph, were very poor growing plants with inferior weak blooms. Selected line breeding and backcrossing has produced some different styles and patterning amongst this colour form. George has shared this material with enthusiasts in the USA, Europe and its native South Africa.

After the show, we visited the world-class Pukeiti Gardens, located between Mount Taranaki (Mt. Egmont) and the coast, just south of New Plymouth. It is renowned for its species and hybrid *Rhododendron* collection. Pukeiti is a 360 hectare rainforest property that was established in 1951 and is an internationally recognised garden and plant collection. We also saw a number of native orchids growing wild, including two *Earina* species and *Winika cunninghamii*.

We visited many parts of the North Island over the next week, seeking out orchids, volcanoes, and fine fish to eat! Our trip concluded in Auckland where I spoke to the New Zealand Clivia Society, on another one of my botanical interests.

The Orchid Council of New Zealand will be hosting a National Expo and Conference later this year. The 7th New Zealand National Orchid Expo 2013 will be held in New Plymouth from 1st November 2013 to 3rd November 2013.

This event will showcase the very best of New Zealand-grown orchids presented in breathtaking floral displays created by orchid society members and individual growers from throughout New Zealand. The educational nature of the event will be highlighted by the attendance of local and internationally renowned speakers, from the United States and Australia, who will be speaking on many topics relating to the culture and breeding of orchids. Speakers who have confirmed their attendance are; Jason Fischer - USA, Jean Stefanik - USA, David Banks - Australia, Michael Harrison - Australia, Selwyn Hatrick - Rotorua, Dennis Chuah - Auckland.

This event is being organised to coincide with the first week of the 2013 Powerco Taranaki Garden Spectacular, which has previously attracted an attendance of 40-50,000. The unique timing of this event will showcase many orchids not normally seen by the public as most orchid shows are held from August to early October. The Expo will be held at TSB Stadium, a well-known venue in Taranaki, and hosts many large national events.

The Orchid Council of New Zealand has held an international conference on a five yearly cycle in various parts of the country since 1980, including a World Orchid Conference in Auckland in 1990 with an attendance of 40,000. The last of these events was held in Palmerston North and was very successful in that it attracted many registrants from around New Zealand and overseas.

For more info go to
http://orchidcouncil.co.nz/7nznoe.htm

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***Disa cardinalis*, South African terrestrial species**


***Disa* (*cardinalis* x (Kewbett x Kewdior)) 'Orange Flare'**

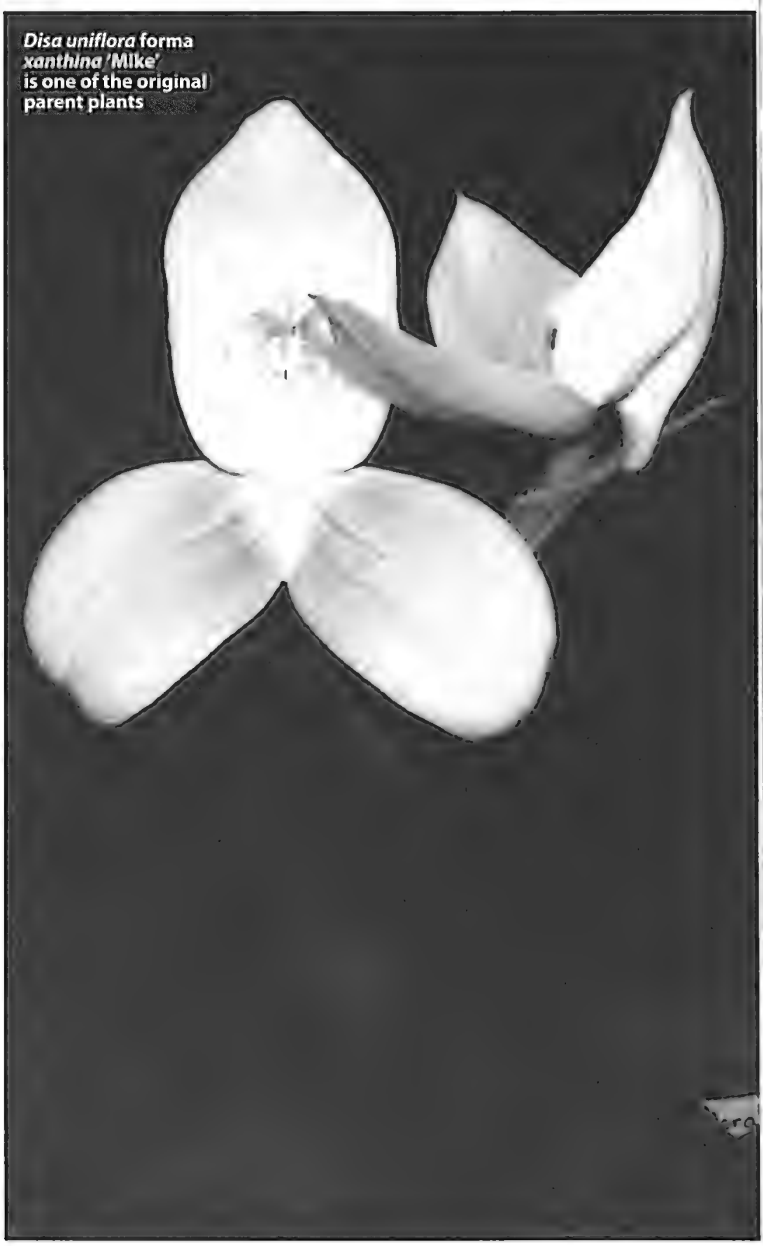
Disa Watsonii
'Cesar'

Disa group display

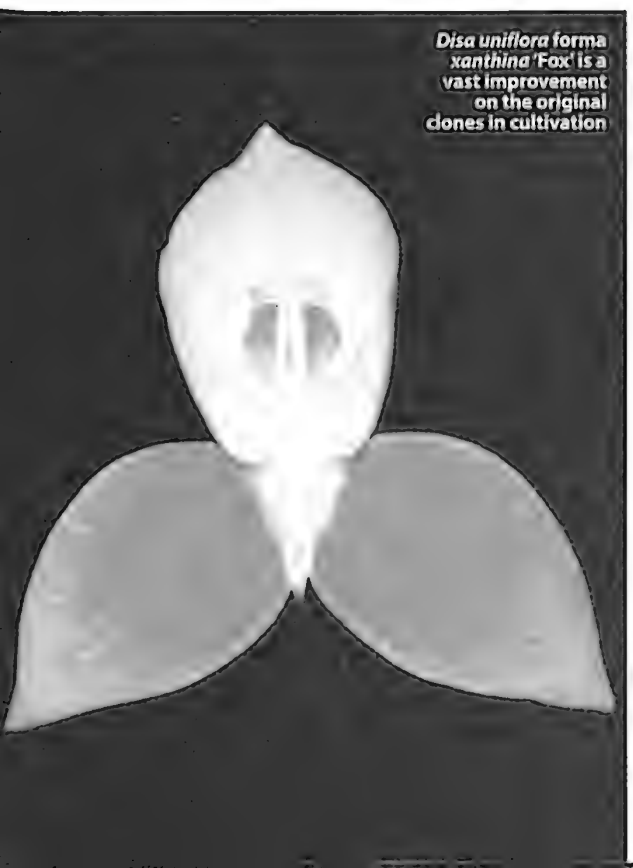
Disa group display

Disa group display

Disa uniflora forma *xanthina* 'Mike' is one of the original parent plants



Disa uniflora forma *xanthina* 'Fox' is a vast improvement on the original clones in cultivation



Disa uniflora forma *xanthina* 'GF' a very attractive colour combination

Orchid Conservation at Home

(winner of the 2012 AOF Essay Prize)

Text and photos by Emily Noble

At first glance, I wasn't so sure that my story of orchid conservation would satisfy the invitation by the Australian Orchid Foundation to write and share ideas and experiences related to the initiatives and practices in the cultivation and conservation of orchids. I don't grow orchids in a limited space, or a controlled environment context. I don't use water or electricity to grow my orchids. I don't even propagate my orchids. My treatment of this essay topic, and the exploration of my own unique challenges in growing orchids, centres on the fact that my orchids grow themselves.

I now own 16 hectares of remnant bush 20 minutes south-west of Ballarat, Victoria on which I have discovered more than of 30 native orchid species so far. As I considered the key words of the general aims of the essay topic, words such as: approaches; philosophies; problems; challenges and obstacles, I became inspired to share my story of in-situ conservation of orchids at my home-to-be, and the tale of challenges I have faced.

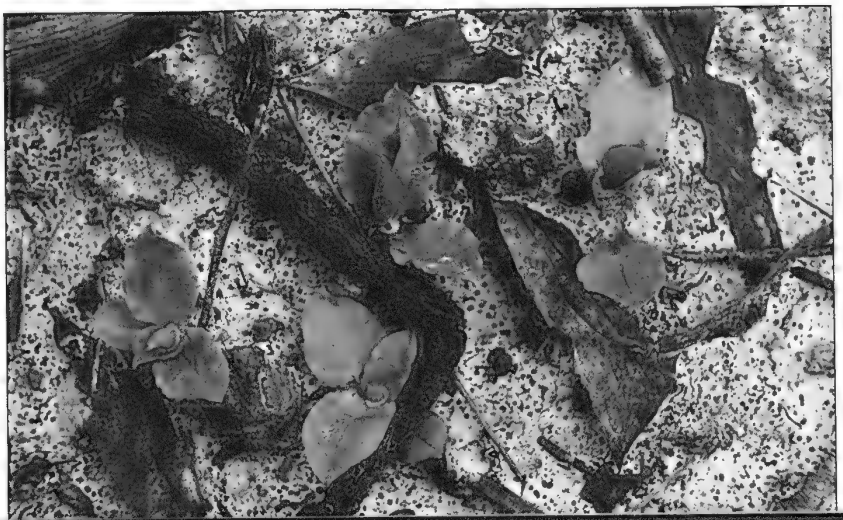
The central theme of my unique cluster of challenges, all be the ones I set for myself, is that I want to eventually build a stone home on the property, and live in the environment, sharing it with my indigenous friends; a tantalising array of orchid colonies growing naturally among an abundance of small grass trees, heath, peas and lilies in a Red Stringy-bark Woodland and Heathy Dry Forest.

My challenges for conservation constitute a rather daunting list of issues, concerns and considerations. I want to move in with my orchid friends without compromising the integrity of their natural environment. It is such a pleasure to observe them in the wild on a daily basis. However, the idea of treading lightly is very difficult to outwork when you factor in the inevitable introduction of excavators, concrete trucks, driveways, concrete slabs, and eventually, a stone home and workshop. This "invasion" also necessitates that as uninvited guests, we exercise due care so as not to introduce pathogens and weeds to their home.

This tale of ambitioned conservation is a massive work in progress, with a host of quite fluid variables; even after mapping the orchid colonies for over 18 months, I keep stumbling upon new colonies and species not previously noted in my monitoring. Add to this that I am still mastering (in my dreams!) my identification skills, given that I am only a relatively recent convert to an interest in native orchids. I now rate myself as an orchid nut, a status I infer from having amassed over 3000 photos of orchids in their natural habitat in just two years. I have observed the premature fate of some of my native friends

Above: Our Ballarat property

Below: Greenhood *Pterostylis nutans* leaves with developing buds



from the early morning nibbling habits of the local fauna, both native and introduced. I have observed certain colonies over successive seasons, and noticed differences in the density of population, height of stem, and general health of the plants. I have noticed that some colonies proliferate in disturbed soil, others in undisturbed soil, some on compacted earth, and others in more friable substrates.

So, as you can see at first glance, the challenges are complex and numerous, and are principally created out of my desire to move in amongst the orchids and share their environment without interfering with what they have managed to secure, judging by the health and spread of some colonies, as an ideal habitat.

As I have considered the range of issues and considerations that beg to be addressed in the task of conserving my orchid patch, and how best to address them in this essay, I have decided to treat them in the order with which my husband and I were confronted by them.

The most time-consuming challenge of all, one that requires hours of dedicated wandering, is to map and identify the orchid colonies. Of course, this could not be done in just one thorough wandering. I go looking for spider orchid flowers in November, having noticed their first shoot of growth in June. I search out the duck orchids in December, having mapped the sites of their first leaves in May. The same goes on for the bird orchids, the tiger, hyacinth, and midge orchids, greenhoods and the rest. What I've found is that a set of first shoots can disappear in an instant. It would appear that the kangaroos that frequent our property take delight in the succulent first shoots if they are lucky enough to find them. Alternative explanations for their premature demise could be the wallabies or wombats, or grubs and slugs. Whatever; we have come to observe, with a hint of grief, that we cannot presume that a healthy mass showing of first shoots, even from an established colony, will eventuate as a healthy mass of flowering specimens.

In our mapping and identification of healthy plots, the time challenge still confronts us. I want to photograph each of the growing stages from first emergence of the shoot, through stem growing and flower bud formation, to flowering of course, but also pollination and the gentle reprise of all back to the compost below. To date, we customarily walk the block each fortnight, and record the stage of all known species on film. This is not a task, as many would well know, of point and shoot. A recurring challenge is to get down to the height of the orchids to take the shot. This requires such delicate camera preparation, to get the right elements of the plant's anatomy in focus, a necessity for accurate plant identification. Impediments to this process include wind, rain, light, and the ever-irritating life of the camera battery! Squatting down low, or lying on the ground, with camera poised for the perfect shot, waiting for a stilling of the subject draws down on the life of the battery. Moreover, this process of recording and identifying our species set is complicated by the specific identification criteria for each potential variety. First a general shot must be taken, then a retreat from the field to plant my head in the books, to ascertain what bits need to be in focus and from what angle. A gaggle of questions abound at this point: are its pantaloons red or green, baggy or close fitting; is it wearing a hat or a tennis cap; are its whiskers long and curly, or has it just shaved; what might it be mimicking, a gnat, a mosquito, a wasp; are its tonsils swollen, or is it's tongue showing signs of oxygen deprivation; is it singing the Polish national anthem, or is it dancing like a court jester?

Along with the task of constant monitoring of the colonies we know, is the chance encounter of a solitary orchid, pushing up through the most unlikely set of conditions, sometimes in the most unexpected of places. Such chance discoveries only exacerbate the challenge of identifying all species on our plot. We don't know where a plant

Above: A "Rufa-type" Greenhood
– *Pterostylis aciculiformis*

Above: Parson's Bands
Eriochilus cucullatus

Left: Midge Orchid
Genoplesium morrisii

could be waiting dormant, and so therefore must wander with an open vigilance and suspicious determination over each and every square metre.

Flowing on from this challenge, of mapping all plants and species, was the task of working out where we could build our stone home. The associated intrusions included the installation of a driveway, extending the existing one further into the block. We have noted that the entrance to the block runs right through the middle of a mass of nodding greenhoods, common bird orchids, and parson's bands. It is conceivable, given my current heightened degree of protectiveness, that had the driveway not already been installed, we would have had real trouble negotiating its path. Other intrusions include the pad for the shed and the house. The pad for the shed was excavated by the previous owner, but we still had to dedicate a space for us to live: a plot for the house. We watched the orchids come and go for a year or so, and were finally able to pick a spot that was 15 metres south of a rich colony of tiger orchids, 10 metres north of a patch of spider orchids and beard orchids, and north-west of a sparse family of midge orchids. We breathed a huge sigh of relief when, after a period of keen and careful observation, we were able to lock in a spot for the house that required no damage to any orchid colonies.

In the process of preparing the house lot, a small dam north of the plot required some modifications to the spillway. With pipes prepared, an excavator dug the trench. The termination point of the trench resulted in the excavator being "locked in" between a patch of tiger orchids, and a patch of spider orchids, flanked by a dam bank to the right, and a mass of grass trees and red stringy-barks to the left. The easy way out was to tip-toe (yeah, right) the excavator through the tiger orchid colony, but no, it had to be up the dam bank, an action of delicate and precarious manoeuvring by my husband. The art of prioritising orchid habitat over all else has been a slight point of contention between my husband and I. He, on the one hand, will prioritise aspect, efficiency and practicality. I, on the other, vehemently prioritise the habitat of those who we are joining with in this place. However, I am very blessed to now declare that he has so fashioned his sensitivities as to now be as mindful as I am about every single plant. So together, we now tread with deft care as we go about making a space for our home to be.

As we have begun preparing for the major works, there have been weekends when my ambition was to begin to improve the habitat in which some colonies grew. In one of these well-intentioned moments, I set to weeding carefully around a plot of greenhoods. The sweet vernal grass, which has also colonised our lowlands, is one introduced pest that we are keen to control. At the conclusion of four hours of painstaking work, I stepped back to admire the first fruit of my weed eradication program, a carefully weeded colony of nodding greenhoods. Upon the very next visit to the block a fortnight later, I was utterly horrified and devastated to find that all orchid shoots had been nibbled back to nothing. I cursed that apparently I had removed from the area the common foodstuff of the local herbivores, and maybe the necessary camouflage of the orchid shoots, leaving them exposed and unprotected for an ensuing carnage. Herein lies one challenge of well-intentioned weed control, and the possible lessons I need to learn about how that is best achieved, given that the priority is conservation and proliferation of our orchid colonies.

In installing our mains power supply, along a line carefully picked out to avoid all known orchid colonies, we proceeded slowly, carefully separating the topsoil from the clay sub-soil as we dug the trench, so that we could replace the clay first and re-cover with topsoil to enhance regeneration on the disturbed line. Despite our mindfulness, part of the patch that was weeded, exposed, and nibbled back was inadvertently covered with a thin layer of clay from our trench excavation. This was a double blow of disappointment, more in our selves, for we had now not only caused the demise of a whole new crop of greenhoods, but allowed the spot to be polluted by spoil from the trench. Our despondency and guilt brewed for half a season, until upon a hopeful re-wandering of the area, we discovered a fresh, vibrant and

Left: Donkey (or Tiger) Orchid *Diuris sulphurea*

Below: Emerging Spider *Caladenia* leaf

luscious crop of greenhood shoots pushing up through the spoil. They appeared to be more vigorous than the last year's crop. We were faced with another challenge. Should we just leave well alone, or should we try and gently sweep away some of the clay spoil? We decided to leave them, to not interfere, and celebrated their demonstrated resilience. They are now budding beautifully.

As we reflected on this happening, we considered other settings in which the orchids have flourished. Much of the property shows signs of having been extensively dug over during the gold rush of the 1860's. There are many slag heaps of clay, shale, and mine spoil. These, we have found, are populated by a dense variety of mosses, fungi and lichen, and quite unexpectedly, orchids. In some places, a solitary stem rises from the spoil, and has produced a beautiful flower. From among other piles, set beneath the red stringy-barks, narrow-leafed peppermints and cherry ballarts, whole colonies of spider orchids and greenhoods proliferate. There is little rhyme or reason, from our grid of understanding, as to how orchids come to inhabit such a diverse range of conditions. These discoveries have forced us to abandon our early ambitions of restoring the original topography back to pre-Gold Rush conditions by smoothing out the "heaps" back into the old, dug-out areas.

With the use of different machines for different works on and down into the soil, we have had to be mindful of what pathogens and weeds we could potentially introduce. To ameliorate this, we have set aside a wash-down area and liberally spray fungicides onto the vehicles and machinery that come onto the property. This quarantine is a challenge due to the time, cost, and effort required, not to mention the patience of visiting contractors. One such contractor stood in utter disbelief as my husband meticulously applied Phytoclean to a truck's underbits before it delivered its cargo. Herein lies another challenge: that of the mindset of the as-yet unaware, the rampant naivety of the masses who have not yet had the wonderful conversion experience of looking down and seeing what rarity and beauty grows up from beneath our feet.

As we think about our rationale and scope for the future conservation of the orchids that grow naturally on our block, the mission is not over. While we have saved the block from its advertised destiny of it being an ideal retreat as a dirt bike riding haven and bushies weekender, or alternatively a potentially neglected bush block upon which the uncontrolled spread of blackberries, radiata pine, gorse and sweet vernal grass might have eventually strangled the native flora, we still have many challenges ahead. While we will have no trouble in keeping motorbikes, horses, cattle and sheep off the property, wild goats that roam the neighbouring Enfield State Forest could, in a brief moment, decimate a season's growth, and compromise the necessary cycle of pollination. Similarly, while we are dependent on seasonal rainfall, and have no control over its provision, the management of water on the block to avert potential soil erosion, maintain pondage levels in the four dams on the block that are a wildlife magnet, and provide for our own reticulated water, becomes implicated in our overall preeminent philosophy of preserving and now enhancing the native orchid habitat.

Questions that have yet to be answered are numerous. One, for example, is to what length should we go in our quest to minimise the threat of destruction by consumption, courtesy of the wandering and foraging fauna and crawling, leaf-munching insects? One option was inspired by our wanderings through the Otways National Park in hunt for the

Above: Spider Orchid *Caladenia tentaculata*

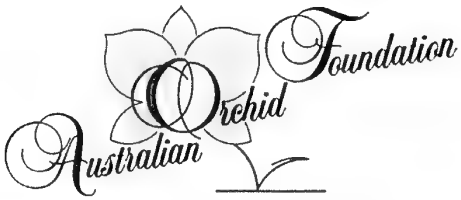
Below: AOF Director Helen Richards OAM (left) presents Emily Noble with the winning prize *(photo: Ivan Margitta)*

Anglesea Large Bearded Greenhood orchid, when we stumbled across the late Ted Faggeter's attempt at creating an exclusion zone around a small plot of rare species. Mesh cages might keep the goats off, but they also keep off all the local herbivores. Perhaps an occasional strategically placed fallen branch might serve to protect enough members of a colony to give me peace of mind, but allow grazing by native fauna too. Attempts to control pest insects and invertebrates are just as likely to discriminate against pollinators, or at least thwart a stage of their cycle of life.

The overarching approach to finding solutions to such questions lies within the chief question itself, and that is: what can we do, if anything to enhance and encourage the spread of the 30 or so species we find grow naturally on our block? Perhaps we just need to reconcile ourselves to the inevitable grazing by creatures great and small, monitor the impacts on the colonies, and learn to propagate some of our orchids to supplement the populations where necessary.

As we look forward, on through the immediate task of home building, and the related challenges we have before us, we have an abiding passion to minimise any ongoing deleterious impact that arises out of our presence, no matter how discretely we choose to live on this beautiful bush block. Moreover, we are keen to actively learn ways and means to more than merely befriend our indigenous population of native orchids. We want them to prosper.

Emily Noble
Ballarat, Victoria
Email: ipjn@bigpond.net.au



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The deadline for receipt of all entries is June 30th 2013

Send your entry to:

AOF Essay Prize P.O. Box 322, Essendon North Vic. 3041

or by email to aof@australianorchidfoundation.org.au

Entry Rules:

- This competition is open to Australian residents only
- The essay will be an original article, not previously published
- The essay must be no more than 4,000 words, short essays are most welcome
- The essay is to be in English, typewritten and doubled-spaced
- Entries may include art work or images
- The authors of the essays will remain undisclosed to the judges, whose decision will be final. If in the opinion of the judges, no worthy essays are received, there will be no award that year
- Non-winning entries will be returned to the sender. These entries may be submitted to the editors of Australian orchid periodicals for publication, with permission from the author
- The winning essay will be announced at the AGM of the Foundation in October 2013
- The winning entry will be published on the AOF website and in Australian orchid periodicals

Disa graminifolia


Disa graminifolia

My Favourite Orchids

Text and photos by Hendrik Venter

After nearly 40 years of growing orchids one ends to have a number of favourite genera, and choosing just 5 favourite species or hybrids was not an easy task! The following represent those orchids on the top of my list.

Disa graminifolia

This stunning species from the Western Cape Province in South Africa is probably my all-time favourite flower. It is the most strikingly coloured of the 'blue disas', and stands tall and proud in full sun in quartzite soil in several areas of this region. These species were previously in the genus *Herschelianthe*, but were moved into *Disa* some years ago. Unlike the red *Disa, Disa uniflora*, this species is considered extremely difficult to grow and is rarely seen in cultivation. It is extremely dependant on climate (the Western Cape is a winter rainfall area) and soil type, is fussy about water quality, and even mature plants need to have soil from the area of origin as they are very reliant on the mycorrhizal fungi present in the soil. Several other species in this group grow in seepage areas and are a lot easier to grow in cultivation. However – going for a hike up Table Mountain or in the Silver Mine Reserve and coming across these beauties standing tall in the grass is just an absolute pleasure and delight, and well worth the effort! *Disa graminifolia* flowers in the wild from January to February.

Disa uniflora

This species, also from the Western Cape in South Africa, is really well-known in the orchid world and is widely cultivated in many parts of southern Australia (especially Tasmania) and also New Zealand. It is not particularly easy to grow as it is also very fussy about water quality, but with a modicum of care and good water this species can certainly be grown with relative ease in cooler areas, as it really does not like high temperatures in cultivation. It also loves good air movement and a lot of fresh, cool air. In nature, *Disa uniflora* grows with its tubers and roots in the frigid mountain streams seeping from the top of the mountains. It grows at the highest elevations so as to have the coolest temperatures, and grows in full sun. Climbing up to the top of Table Mountain to see these beauties in their natural habitat was one of the great pleasures of my life. It is always remarkable to me to see how plants, and especially orchids, can adapt to provide themselves with exactly the conditions they need to grow and flower well. This species is quite variable in shape and intensity of colour, with colours ranging from pink to orange and (mostly) red, and a yellow form was also discovered some years ago, but this is quite rare and only grows in a few locations. Thankfully that colour form has been multiplied from seed and division in cultivation. *Disa uniflora* hybridises easily and well with several other species in the genus and a range of stunning hybrids (which are even easier to grow) is available. *Disa uniflora* can be found in flower from spring to autumn, but the main flowering season is from December to February.

Disa uniflora habitat

Disa uniflora in the wild

Disa uniflora
in the wild

Disa uniflora

Disa uniflora

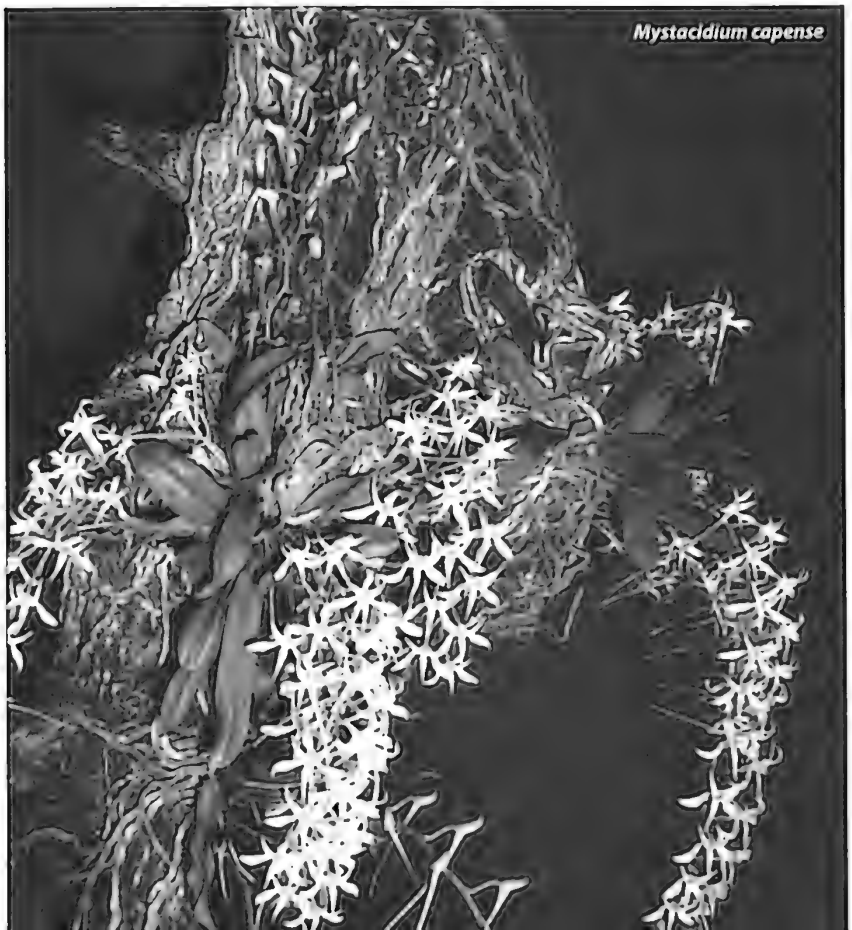
Line bred selected sibling crosses of *Disa uniflora* are vigorous growers

Mystacidium capense

This species occurs all along the eastern half of South Africa and is an epiphyte on a variety of host trees. It prefers quite a rough bark for its host, and is found in semi-shade to fairly bright light, in quite moist areas. It is fairly easy to grow in cultivation and will readily establish itself on a new mount. This species cannot be grown in a pot – it has long, rambling, thick roots which also contain chlorophyll for photosynthesis, so the roots have to be exposed to the light. In fact, if you attempt to grow this plant in a pot, the roots will literally push the plant out of the pot. *Mystacidium capense* loves growing in groups on a mount and forms clumps of plants itself by producing new plants at its base. This causes an absolute explosion of flowers in summer as each plant will produce several arching sprays of pristine white flowers which are fragrant at night. It is a good idea to mount several plants on a long mount for the best display. As *Mystacidium capense* occurs in a summer rainfall area, it likes a lot of water and fertiliser over the warmer months, with less water in winter. It will tolerate lower temperatures, but does need some protection from cold – it is probably best to grow it at a minimum of 10°C. This species flowers in summer, from December to January. I always used to refer to these plants as my White Christmas orchids – in my hometown of Pietermaritzburg, we lived near a park where thousands of these plants were growing in fir trees, and they always started flowering just before Christmas. These plants are small in size but big on impact and are definitely a worthy addition to every collection as they are really so easy to grow.

***Mystacidium capense* in habitat**

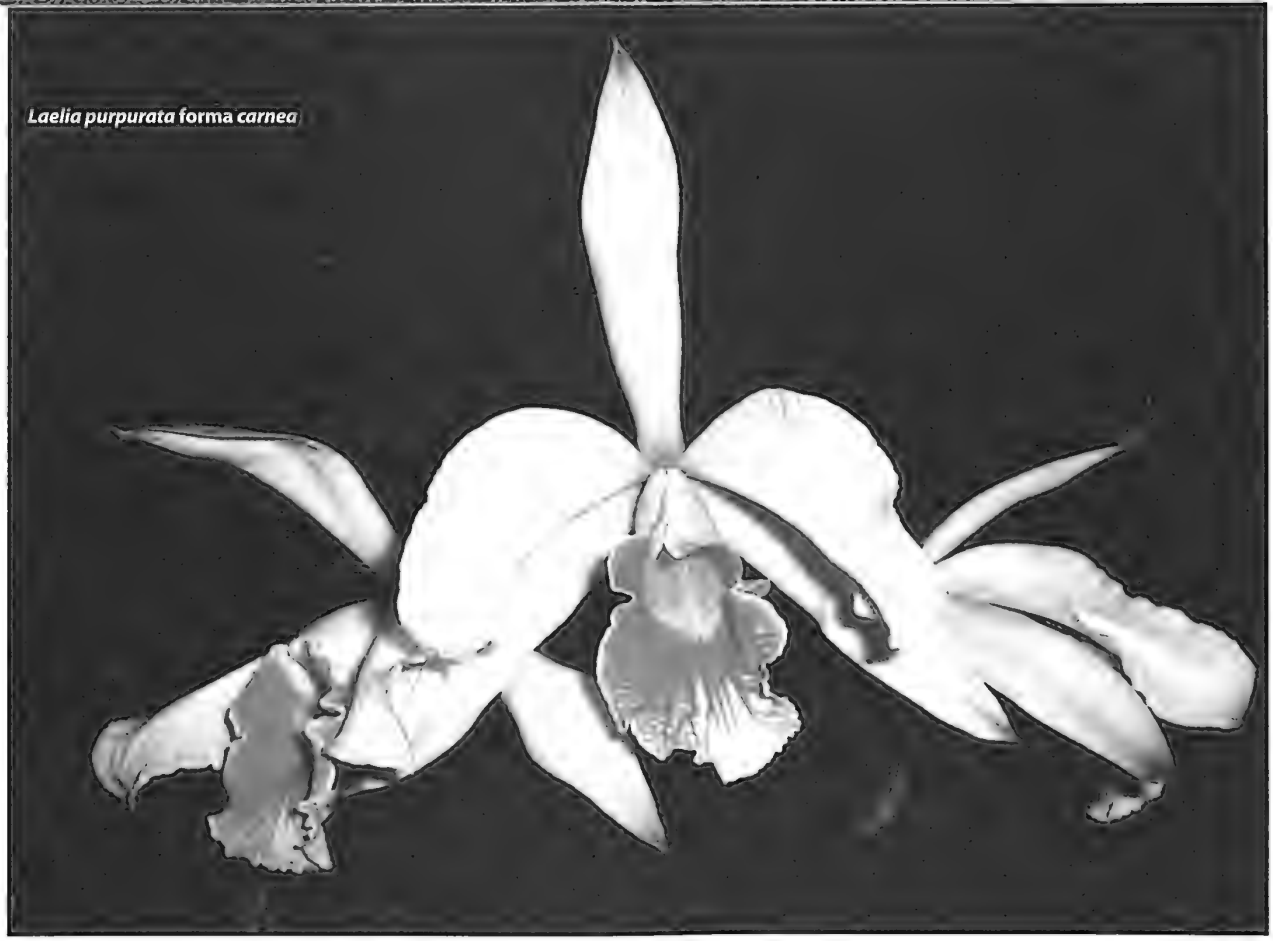
Mystacidium capense



Mystacidium capense

Laelia purpurata

I have always loved these impressive plants since I saw a whole collection of them flower *en masse*. This is a very variable species with many hundreds of named varieties, mostly based on colour variation. In fact, in its native Brazil, there are orchid societies devoted solely to this species, and they arrange shows where only this species is shown. There is even an extensive book just on this species. It is a robust plant which is fairly easy to grow under intermediate to slightly warmer conditions, with very bright light, approximating full sun. Even though the leaves are hard and leathery, these plants should not be exposed to frost and extreme cold. They are epiphytes and must be grown in a free-draining coarse mix, and should be fed and watered regularly in the summer. In winter, a bit of a dry rest between waterings is beneficial to let the pseudobulbs mature. When mature, specimens of *Laelia purpurata* can take up a lot of space on the bench, and are perhaps not suitable for growers with limited space. This species flowers mainly in summer, normally around December, and are therefore quite useful in one's collection as there is not much else that flowers at that time of year. These plants have several large flowers, up to 15cm across, and really make an impressive display. Some taxonomists now refer to this taxon as *Cattleya purpurata*.



Laelia purpurata forma *carnea*

Laelia purpurata forma *werkhauseri*

Dendrobium thyrsiflorum

The genus *Dendrobium* has always been one of my favourites as there is such immense variety in it. I just love the tiny miniatures and botanicals, but probably, my favourite species of them all is *Dendrobium thyrsiflorum*. I first obtained a plant of this species as a child, when my local orchid society did an import from Thailand, and over three decades this plant grew into an impressive specimen in a 40cm basket. This species is well suited to specimen plant culture and loves to be grown in flat baskets. As the plants are very tall and dendrobiums like to be under-potted, it is not that easy growing these plants in pots as they tend to become top-heavy. These plants do well under intermediate to slightly warmer conditions and like bright light, and lots of water and feeding in summer. They want less water in winter, but still prefer good humidity levels and always want good air movement, and do not want to be exposed to frost. In fact – the whole of the Section *Callista* is one of my favourites – and some species do need a cooler, drier winter to flower well. The different species in this section flower at different times, but most of them flower from September to November, when even smaller plants can put on a wonderful show.

Hendrik Venter
Bundoora, Victoria
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Dendrobium thyrsiflorum

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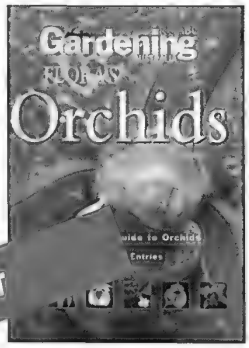
FLORA'S ORCHIDS

Senior Consultant David P. Banks



Part of the best-selling *Flora* range, this is the definitive guide to orchids with over 1,500 entries. Ranging from the unique to the unusual, the beautiful to the bizarre, orchids have long symbolised beauty, elegance and refinement. *Flora's Orchids* presents more than 1,500 varieties of this highly variable plant family, with entries accompanied by at least 1,300 stunning colour photographs. The orchids are arranged by genus in an A-Z format. Each entry first lists the scientific name in Latin, often accompanied by a Latin synonym and where appropriate, the translated common name. Size, spread and height are listed, followed by symbols indicating plant type, natural habitat, growing conditions, frost tolerance, flowering season, type of flower, and preferred method of cultivation. The brief description of each entry includes type of genus, geographic area, and flowering and dormancy seasons. Also included is a wealth of sound cultural and propagation advice.

AOR Editor David P. Banks was the Senior Consultant for *Flora's Orchids* and is also credited as the Principal Writer. Especially valuable for aspiring botanists and average gardeners is the background information that precedes the dictionary text and explains orchid varieties, taxonomy, hybridisation, history, cultivation, propagation, and more. The history section delves into the fascinating historical development of the plant for culinary and medicinal usage and also explores the use of orchids in folklore and literature. A detailed cultivation table for each of the species is found in the appendix. This work is regarded by many as the logical replacement of *What Orchid Is That?*

368 pages, colour.
308mm x 238mm.
Hardcover.

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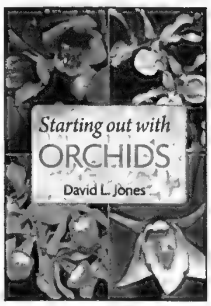

STARTING OUT WITH ORCHIDS

by David L. Jones

David Jones is arguably one of Australia's most prolific, precise and respected botanical and horticultural authors. The book is divided in two parts. Part One begins with the cultivation chapters, covering Easy Orchids for Beginners, General Cultivation Requirements, Growing Epiphytic Orchids, Growing Terrestrial Orchids, Orchid Pests and Diseases, Housing Your Orchids and Propagating Your Orchids. The information contained within these pages alone is required reading for all beginners through to experienced orchid growers. The text is very easy to read and understand with numerous sound cultivation tips and treatments discussed. There are many excellent and clear line illustrations that help describe terms or highlight diagnostic features. There are over 250 colour photographs. Part Two discusses the orchids themselves with concise information on each species. They are grouped primarily according to climatic requirements, starting with cool growing orchids progressing to the warm growers, in alphabetical sequence first with terrestrial genera, followed by the epiphytes. Both Australian and exotic species are treated together. For each entry there is specific detailed information on each species, as well as a simple table giving the basic cultivation needs and flowering season. A glossary is also included to explain unfamiliar terms.

240 pages, colour.
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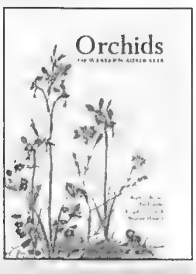
ORCHIDS OF WESTERN AUSTRALIA

by Andrew Brown, Pat Dundas, Kingsley Dixon & Stephen Hopper



Written by three of Western Australia's most prominent orchidologists and featuring over 200 full-page, colour illustrations by renowned botanical artist Pat Dundas, *Orchids of Western Australia* is the first modern text cataloguing all 409 known species.

This comprehensive resource for hardened enthusiasts and initiates alike features a wealth of information in a single volume – from a detailed introduction to WA orchids to information on each species, including who named them, where they were first collected, their habitat, distribution, flowering period, size and distinguishing features. This book is the culmination of decades of work by WA's foremost experts, each dedicated to the conservation of one of the world's most important regional orchid floras.

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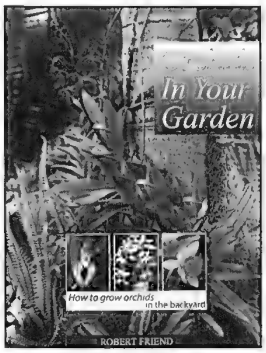

ORCHIDS IN YOUR GARDEN

How to grow orchids in the backyard

by Robert Friend

It sounds too good to be true, but orchids are as easy to grow in the backyard as a lawn or a bed of roses. Despite their exotic reputation, the everyday gardener can grow orchids without special pots or greenhouses.

The book shows you haw to introduce orchids into the garden, by attaching them to trees, fixing them on rocks and walls, or planting them in garden beds. With more than 150,000 species and hybrids of orchids in the world, there are plants suitable for every garden.

Robert Friend draws on a lifetime's experience with orchids to explain how to choose the right orchid for your climate and how to landscape orchids in different types of gardens. Ranging from tropical to cool climate areas, from large acreages to small courtyard gardens, almost every backyard can enjoy the best of one of nature's wonders.

144 pages.
Colour and B&W.

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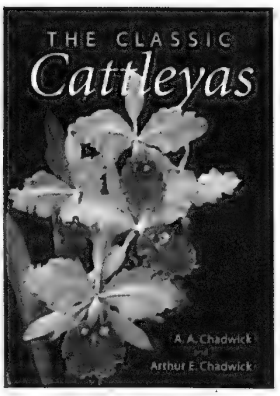
THE CLASSIC CATTLEYAS

by A.A. Chadwick and Arthur E. Chadwick



In 1818, William Cattley succeeded in flowering one of the first species of the genus that would bear his name. These first cattleyas are the classic cattleyas, whose form defined the essence of tropical orchids for generations to come. Indeed, the colour of their flowers became known as "orchid." In this helpful and informative book, each classic *Cattleya* species (and cattleya-like *Laelia* species) is described in fascinating detail, and its role in breeding programs is elucidated. All that is required to appreciate and grow the large-flowered cattleyas successfully is included. There are ten line drawings and 162 wonderful colour photographs. Cultivation, humidity and watering, fertilising, propagation, and diagnosing and treating problems are detailed, making this volume valuable for both veteran orchid enthusiasts and those who simply love these beautiful flowers.

252 pages, colour.
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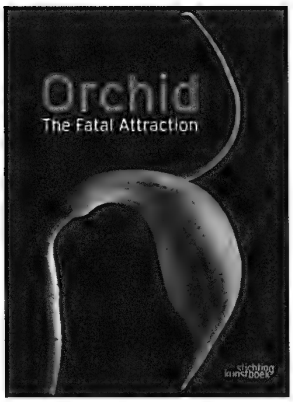

ORCHID: THE FATAL ATTRACTION

by Anne Ronse

The subject of orchids is one close to the heart of many floral designers. some feel it's a privilege to work with these flowers and plants but often wonder how many designers actually decide to investigate the history and nature of them rather than just how to condition them. The text by Dr Anne Ronse, is informative and enthusiastic and the photography is superlative! It's so good that the flowers literally drip off the pages capturing the imagination and the heart. If you want something special, are addicted to orchids and want to luxuriate in glorious text and images; this is the book for you.

142 pages. Colour. Hardcover.

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GROWING BROMELIADS (3rd Edition)

by the Bromeliad Society of Australia

Many orchid growers also have a few "broms" in their collection and gardens. This is a revised 2006 edition of the highly successful book on growing and caring for bromeliads. This book was compiled and revised by experienced members of the Bromeliad Society of Australia.

Growing Bromeliads describes how and where to grow over 200 species and hybrids, and details ten of the most popular genera with brief notes on the more unusual genera. The main genera covered are: *Aechmea, Ananas, Billbergia, Cryptanthus, Dyckia* and *Hechtia, Guzmania, Neoregelia, Nidularium, Tillandsia,* and *Vriesea*. Descriptions of the native habitats for each of the ten genera are given, enabling you to provide the right growing conditions for any of these species within these genera. In total, over 400 species/hybrids are discussed.

The book gives an interesting overview of the Bromeliad family, including a brief history of Bromeliad cultivation. There are also separate chapters on how to propagate these wonderful plants and on their unique botany. All of this is written in straightforward language with scientific terminology kept to a minimum. This new 128 page updated Third Edition includes: a new chapter on Australian hybrids; ten new species; new chemical treatment for bromeliads and recent name changes.

Growing Bromeliads is a great introduction to growing bromeliads in Australia. As such, it is a very useful book for someone who has a few bromeliads and wishes to find out more about how to grow them.

128 pages, 100 colour photos. Softcover.

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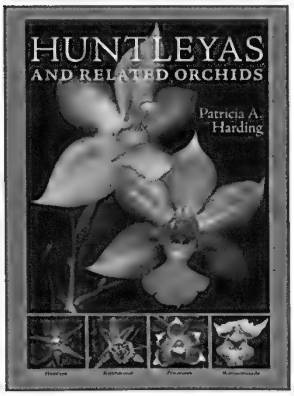

HUNTLEYAS AND RELATED ORCHIDS

by Patricia A. Harding

Revered by avid orchid collectors for its delightful, star-shaped flowers, *Huntleya* is a small group of orchids found low in the forest. *Huntleya* is a small orchid genus that includes fourteen species. They occur in wet cloud forests at medium altitudes of Guatemala, Costa Rica, South America down to Bolivia. The type species *Huntleya meleagris* also occurs in Trinidad. Besides their striking colours — from deep blue to waxy red, royal purple to almost black — flowers of this group are known for their distinctive shapes, patterns, and textures. As appealing as these lovely tropical orchids are, their identification has been confused since the first species was described in the mid-1800s. Recent DNA studies have led to a clearer understanding of relationships and, as a result of this clarity, it is now possible to sort out the taxonomic problems and identify the characteristics that set species apart. In this first book devoted to the *Huntleya* alliance, author Patricia Harding presents evidence from the scientific literature, other growers, and her own experience that will enable orchid enthusiasts everywhere to identify their plants and grow them successfully. Patricia A. Harding is an accredited American Orchid Society judge who has been growing and photographing orchids for three decades.

260 pages, 150 colour photos. Hardcover.

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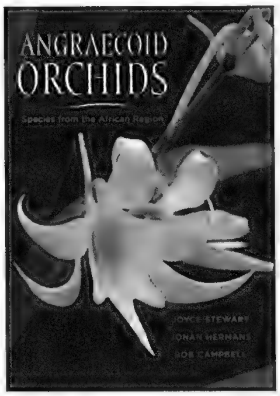

ANGRAECOID ORCHIDS: Species from the African Region

by Joyce Stewart, Johan Hermans, and Bob Campbell

These so-called 'Jewels of Africa' with their sparkling flowers, distinctive growth habit and floriferous nature are much prized and this account, the first to include the Angraecoid orchids of both Africa and Madagascar, is long awaited. It brings together, in a single volume, descriptions of all 690 species in this intriguing group of orchids and will be the essential reference for all Angraecoid orchid enthusiasts for years to come. Including such horticulturally important genera as *Angraecum, Aeranthes, Aerangis* and *Jumellea*. Stewart, Herman and Campbell have all spent time in various parts of eastern and southern Africa and precise ecological information relating to habitat, altitude preferences and flowering season of individual plants will be particularly helpful to growers. The diagnostic features of each genus are illustrated and over half the species are accompanied by exquisite photographs taken in both wild habitats and in cultivation.

432 pages, 290 colour photos. 185mm x 265mm. Hardcover.

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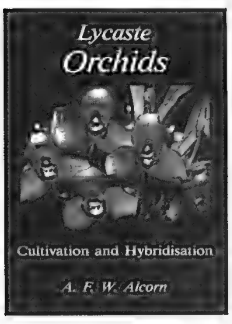

LYCASTE ORCHIDS - Cultivation and Hybridisation

by A.F.W. Alcorn

Lycaste orchids are easy to grow, and they produce flowers that range from the beautiful to the bizarre. No book previously has provided detailed cultural requirements of the Lycaste, and this book should fill that gap, and encourage new growers to take up the cultivation of this beautiful genus. A section on hybridising contains valuable information on inheritance and genetics that will benefit any hybridiser, not just the grower of Lycastes, as well as helpful hints on how to avoid pitfalls in your hybridising program. Michael Hallett, a friend of Fred Alcorn for a number of years, co-wrote this book with Fred and has completed it posthumously. He has a background in genetics, research and botany, and a passion for plants, especially orchids.

237 pages. Colour and B&W.

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MASDEVALLIAS: Gems of the Orchid World

by Mary E. Gerritsen and Ron Parsons

For the species orchid enthusiast, cool to intermediate orchid grower, or anyone simply "mad about Masdevallias," this is a first complete reference to these collectible new world orchids. An inspiring tribute to their beauty and a practical guide to their care, the book offers detailed advice on all aspects of culture. For those enthusiasts who are up to a challenge, chapters on propagating, showing, and registering Masdevallias are also included. Ron Parsons is one of the finest nature photographers in the world and has an encyclopaedic knowledge of species orchids, with the genus *Masdevallia* being one of his favourites.

300 pages, 149 colour photos. 190mm x 255mm. Hardcover.

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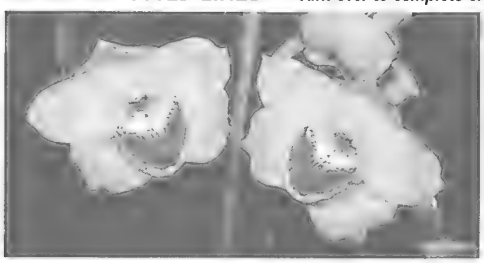

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Australian Orchid Foundation 2012 Award of Honour to Phyllis and Christopher Nicholas

by Beverley Woodward, Lois Dixon-Ward and David Cannon

Phyllis and Christopher Nicholas were awarded the prestigious "Australian Orchid Foundation Award of Honour" for 2012 at its Annual General Meeting held in Melbourne in October 2012.

For over fifty years Phyl and Chris have contributed to the advancement of orchid growing, not only in Tasmania but throughout Australia. Their involvement was integral in the formation of the Burnie, Devonport and Launceston Orchid Societies, and their active roles with the Tasmanian Orchid Society were honoured with Life Membership.

They became involved with the establishment of the Australian Orchid Council (AOC) Judging Panel in Tasmania, running classes for student judges. As the Tasmanian representative of the AOC, Chris was granted an Honorary Fellow of the AOC (FAOC) in 1972.

Phyl and Chris are both exceptional orchid growers, Chris specialising in Oncidiinae and Laeliinae and Phyl in Pleurothallidinae. Over many years they have demonstrated that just about every orchid genus can be grown in Tasmania from tropical *Phalaenopsis* in a heated glasshouse, to cooler growing varieties such as Cymbidiums and Australian native orchids in the garden. Their extensive knowledge accumulated over many years of experience is willingly shared with fellow orchid growers both in Australia and overseas.

They have supported the Australian Orchid Foundation since its inception in 1975, and have made Tasmanians aware of the aims of the Foundation.

The presentation of the "Australian Orchid Foundation Award of Honour' took place on 19th November 2012 at the Tasmanian Orchid Society meeting in Hobart. The President of the Tasmanian Orchid Society Jan Dicker and Secretary Bev Woodward introduced AOF Director Lois Dixon-Ward and Associate David Cannon to the members present. Many past members also attended this meeting to witness this very special presentation. Phyl, Chris and their daughter Wendy were seated together in the front row. Due to ill health, it was the first time they had been able to attend an orchid meeting together for more than 12 months and it was such a delight for the members to catch up with them after such a long time.

David Cannon read the "AOF Award of Honour" citation to all in attendance and presented Phyl and Chris with the framed citation. Lois Dixon-Ward then presented the "AOF Award of Honour" trophy. Phyl, with the aid of her walking stick, stood up in front of the members and in a very clear voice, replied to the presentation, and then insisted Chris respond as well. Chris spoke about the early days and the formation of the AOF. The repartee between these two beautiful people was priceless.

A special supper had been organised with a huge cake as a centrepiece topped with the initials 'P & C' piped in chocolate along with a *Masdevallia coccinea* painted on a sheet of white chocolate. Phyl and Chris cut the cake to much cheering and clapping of hands.

During the evening Phyl and Chris were asked to comment on the judging of *Sarcochilus*. A few members also brought along their orchid plants to ask them for advice as to what was wrong with the plant, colour of the flowers, pale leaves, should they break up their plant etc. Their advice and opinions are still greatly valued and respected.

Phyl and Chris can rightly be recognised as doyens of the orchid world and justly deserve this recognition for a lifetime of commitment and achievement in promoting orchids. ■

Above: Lois Dixon-Ward, David Cannon with Phyl & Chris Nicholas

Australian Orchid Review

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2013 ORCHID EVENTS – *What's on!*

February 24 Hills District Orchids – Autumn Open Day – Northmead, NSW

March 1-3 Queensland International Orchid Fair – Beenleigh, QLD

April 5-6 Castle Hill International Orchid Fair – Castle Hill, NSW

April 13-14 Collector's Plant Fair – Hawkesbury Race Club, Clarendon, NSW

May 17-19 Orchids Out West – Hawkesbury, NSW

June 1-2 Orchids in Paradise – Southport, Qld

June 8-9 Gympie Golden Orchid Spectacular – Gympie, Qld

June 29-30 Mingara Orchid Fair & Show – Central Coast, NSW

July 7 Tinonee Orchids Open Day & Show – Tinonee, NSW

July 28 Hills District Orchids – Winter Open Day – Northmead, NSW

August 9-11 St Ives Orchid Fair – St Ives Showground, NSW

August 23-25 ANOS Conference and Show – Brisbane, Qld

Laelia purpurata forma *alba* 'Louanne'
Plant and photo: Bill Dobson ©

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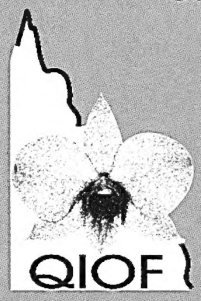

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